CHAPTER 20

WORK TEAM DIVERSITY

Susan E. Jackson and Aparna Joshi

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Most organizations in the United States recognize workplace diversity as a challenging reality. Consider the case of a Fortune 500 company that we have studied (Jackson & Joshi, 2004; Joshi, Liao, & Jackson, 2006). Nearly 3 decades ago, in response to Title VII law and the civil rights movement, this company initiated proactive management practices to increase the representation of women and minorities at entry levels as well as in management. However, despite persistent top management support for its diversity policies and external recognition for its diversity management practices, our recent analysis of company data revealed that ethnically diverse work teams experienced lower levels of cooperation and higher levels of conflict, compared to ethnically homogeneous work teams. We also found that gender- and ethnicity-based pay differentials persisted for equally performing employees in the same jobs, despite our subject company's efforts to eliminate such inequities. As this company discovered, it is easier to create a diverse organization than it is to manage a diverse organization effectively and achieve its full potential (Jackson & Joshi, 2004; Joshi, Liao, & Jackson, 2006).

The conditions that have increased diversity in organizations are many and include forces both within and external to organizations. For most U.S. employers, today's concerns about diversity are rooted in a history that reaches back half a century or more. An achievement of America's civil rights movement, Title VII of the 1964 Civil Rights Act made it illegal to engage in employment practices that discriminate on the basis of race, color, religion, sex, and national origin. Subsequent federal, state, and local legislation made it illegal for employers to discriminate on the basis of other characteristics, including age, disability, and in some places, sexual orientation. In supporting such legislation, American society endorsed the principle that employers should provide equal employment opportunities to all people of similar qualifications and accomplishments.

Societal mandates have helped curtail employment policies and practices that discriminated against members of various minority groups and imposed both monetary and reputational costs on organizations that failed to implement fair employment practices (Wright, Ferris, Hiller, & Kroll, 1995). The subject company's responses to Title VII and related litigation led to the adoption of aggressive affirmative action programs and the design of new approaches to measuring employee performance. The primary goal of such organizational responses was to reduce differences in employment conditions and outcomes among employees from different demographic groups.

By the late 1970s and into the 1980s, many employers began to understand that simply avoiding discriminatory employment practices was not sufficient. As workplaces became more diverse, employers saw that new management initiatives were needed to ensure that the talents of all employees were leveraged to achieve organizational goals. According to

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one survey of *Fortune* 1000 companies, by the beginning of the 21st century, 95% of large U.S. companies had implemented diversity initiatives to address racial and gender diversity (Grensing-Pophal, 2002). Foremost among the new initiatives were training programs aimed at changing employees' attitudes and behaviors. Other popular diversity management initiatives included mentoring for women and minorities and supporting identity-based affinity social networks.

The widespread adoption of training programs intended to improve relationships among employees from diverse backgrounds quickly led to an expanded meaning for the concept of diversity. Employers realized that visible, legally protected employee attributes such as ethnicity and gender were not the only types of differences that mattered in the workplace. Today the concept of diversity is used by employers and scholars alike as shorthand to refer to the wide range of physical, cultural, psychological, and behavioral differences that can be found in most large organizations. At the company we studied for example, diversity management practices are aimed at ensuring that *all* employees feel they are treated fairly. In this new environment, the specific concerns of majority group members in the workforce (e.g., White men, in the United States) receive as much attention as the concerns of minority group members.

In the 1990s, employers began to embrace the argument that supporting diversity made good business sense. Among the many arguments made in favor of recruiting and retaining a diverse workforce was the assertion that diversity could contribute to better decision making and innovation and thereby improve the financial bottom line (Kochan et al., 2003). To date, there is some limited empirical evidence to show that diversity promotes improved organizational performance (Richard, Barnett, Dwyer, & Chadwick, 2004). Yet, in organizations that have become flatter, less bureaucratic, and more reliant on teamwork (e.g., see Harris & Beyerlein, 2003), diversity can be disruptive. Despite the challenges, U.S. employers generally concur that effectively managing diversity is mandatory for organizations that seek to fully utilize all of the talent that is available in the workforce. Increasingly, this important management challenge is being recognized in other countries, too (The Conference Board, 2006; Lester, 2006; Mangaliso & Nkomo, 2001; Nishii & Özbilgin, 2007b; Wu, Yi, & Lawler, 2000).

Like employers, organizational scholars have struggled to understand how diversity shapes employees' experiences at work. The scholarly evidence confirms what employers already know—diversity seems to be a double-edged sword. On the one hand, it can bring with it interpersonal conflict, loss of social cohesion, and greater employee turnover. On the other hand, it can spur innovation and improve decision making (for other comprehensive reviews, see Jackson, Joshi, & Erhardt, 2003; Jackson, May, & Whitney, 1995; Milliken & Martins, 1996; Webber & Donahue, 2001; van Knippenberg & Schippers, 2007; Williams & O'Reilly, 1998). A major challenge for organizational psychologists is to understand the dynamics of diversity well enough to offer practical advice about how to manage it effectively.

In the past 2 decades, much of the empirical research on diversity in organizations has focused on improving our understanding of the consequences of diversity in work teams and other relatively small work units. The central research question has been: To what extent and in what ways do work teams consisting of individuals who are relatively similar to each other function differently from teams consisting of individuals who are dissimilar?

Typically, studies of work team diversity document the types of diversity present in teams and then assess whether differing degrees and types of diversity are systematically related to team processes and outcomes. (In contrast, research on discrimination and fairness often compares the employment experiences of individual employees from different backgrounds.) Guiding much of the research on work team diversity is a desire to understand the conditions that enable some diverse teams to effectively pool and use their differences to achieve outstanding performance, while avoiding dysfunctional conflicts.

In this chapter, we report the current state of our knowledge about the interpersonal dynamics that unfold within (usually) colocated work teams and small work units, as well as the consequences of such dynamics. Throughout this chapter, we use the term *work team* to refer to organizational units of at least

3 and seldom more than 50 employees with responsibilities that require them to work interdependently.

We focus on work teams as the unit of analysis rather than organizations because the vast majority of accumulated psychological research is based on studies of work teams or similar small units within organizations. Examples of the types of work teams that have been studied include top management teams, customer service teams, production teams, sales teams, and research and development teams. (See also chap. 19, this volume; Vol. 3, chap. 9, this handbook.)

To maximize the workplace applicability of conclusions drawn from this review, we focus on research conducted in employment settings. By focusing on research conducted in group dynamics, much of which was conducted in other settings (e.g., school classrooms and laboratories, college sports, juries). We acknowledge the importance of that research and refer to some of it, but we do not claim to provide a comprehensive review of it here.

We also note that most of the research we review was conducted in North American organizations and published in English-language journals. Increasingly in recent years, studies of work team diversity conducted outside North America also have begun to appear in English-language journals. We include such research in our review whenever possible, while recognizing that the phenomena of diversity cannot be fully understood without taking national contexts into account (Joshi & Roh, 2007; Triandis, 1992).

Our discussion proceeds as follows: We begin by describing the many types of work team diversity that have been studied in organizational settings. Next, we offer brief overviews of the major theoretical perspectives that have guided research aimed at understanding the consequences associated with various types of work team diversity. We then summarize the empirical research findings that have accumulated during the past 15 years. Consistent with our focus on research that can be applied in the workplace, our review is organized around the most frequently studied consequences of team diversity (for a recent review focused on theoretical advances in understanding diversity, see van Knippenberg & Schippers, 2007). After describing the research findings, we conclude by providing suggestions for future research.

THE NATURE OF WORK TEAM DIVERSITY

The term *diversity* is now widely used by scholars to refer to the composition of social units (for an overview of the debates and history associated with the term, see Ashkanasy, Härtel, & Daus, 2002). Work team diversity is usually measured using compositional measures that assess the distribution of team members' personal attributes, including their demographic and psychological characteristics.

Types of Diversity

To understand how diversity influences work teams, it is useful to differentiate among various types of diversity, because different types of diversity may have different consequences. A simple taxonomy for describing the types of diversity present in work teams is shown in Exhibit 20.1.

The columns in Exhibit 20.1 differentiate between relations-oriented and task-related diversity (Jackson et al., 1995; Milliken & Martins, 1996). *Relations-oriented diversity* refers to the distribution of attributes that are instrumental in shaping interpersonal relationships but which typically have no apparent direct implications for task performance; age, gender, and personality characteristics are examples of relations-oriented diversity. *Task-oriented diversity* refers to the distribution of attributes that are potentially relevant to the team's work. Organizational tenure, formal credentials and titles, and cognitive abilities are examples of task-oriented diversity.

The rows in Table 20.1 differentiate between readily detected (or surface-level) diversity and underlying or deep-level diversity. Generally, *readily detected diversity* refers to differences among team members on attributes such as gender, age, and nationality—attributes that are easily discerned or quickly discovered. Sociological explanations of diversity emphasize the role of memberships in easily discerned social groupings because social groups are assumed to be in competition with each other for material and social resources (e.g., Blalock, 1967).

Underlying diversity refers to differences among team members on attributes that generally become

Exhibit 20.1
A Taxonomy for Describing Types of Work Team Diversity

	Diversity on relationship-oriented attributes	Diversity on task-oriented attributes
Diversity on readily detected attributes	Gender	Department/unit membership
	Age	Organizational tenure
	Ethnicity	Formal credentials and titles
	Nationality	Education level
	Religion	Memberships in professional associations
Diversity on underlying attributes	Personality	Task knowledge
	Attitudes	Organizational knowledge
	Values	Experience
	Racial/ethnic identity	Cognitive abilities
	Sexual identity	Communication skills
	Other social identities	Mental models

Note. From *International Handbook of Organizational Teamwork and Cooperative Working* (p. 279) by M. A. West, D. Tjosvold, and K. Smith (Eds.), 2003, New York: Wiley. Copyright 2003 by Wiley. Adapted with permission.

known only through interaction, such as personality, attitudes, and skills. Many psychological explanations emphasize the role of individual differences in characteristics that are less easily detected and discovered only through direct interaction. Psychological explanations of diversity often assume that readily detected attributes are of little theoretical interest except to the extent that they serve as easy-to-measure correlates or indicators of underlying attributes.

Contrary to some others (e.g., van Knippenberg, De Dreu, & Homan, 2004; van Knippenberg & Schippers, 2007) who favor abandoning such typologies, we believe that paying attention to the distinctions shown in Exhibit 20.1 is useful for interpreting past research and is necessary as the field continues to build a systematic body of evidence about the consequences of diversity. Those who are pessimistic about the value of such distinctions point out that there is no clear pattern of results associated with different types of diversity. Our view is that the body of evidence to date is still quite small; there are far too few studies to permit firm conclusions about whether and how the potential consequences of various types of diversity differentially influence work teams.

Measuring Diversity

In everyday conversations, people sometimes confuse the concept of diversity, which is a characteristic of social units such as work teams, with individual attributes. For example, an African American colleague might be referred to as "a diverse employee." Or one may use the word *diverse* as if it were a synonym for *minority,* as when a team of five African Americans is referred to as "a diverse team."

Compared with its usage in everyday conversations, the concept of diversity is used more narrowly in the scholarly literature to describe the extent to which members of social units (e.g., work teams) are dissimilar from each other on one or more attributes. High levels of team diversity exist to the extent that members of a team are different from each other (i.e., the team is heterogeneous), and low levels of diversity exist when team members are similar to each other (i.e., the team is homogeneous). Thus, in the scholarly literature, a work team of five African American sales employees would be correctly described as having a very low degree of ethnic diversity because they all have the same ethnic background. The same reasoning would apply to a team of five Caucasian sales employees. Most theoretical perspectives would expect similar team

dynamics to occur in the all–African American and all-Caucasian work teams, because both teams are homogeneous. Of primary interest in studies of team diversity are comparisons of fairly homogeneous versus more heterogeneous teams.

A comprehensive discussion of the measures that have been used to assess work team diversity is beyond the scope of this chapter (for more detailed discussions, see Harrison & Klein, 2007; Harrison & Sin, 2005; Shaw, 2004). In general, however, most studies attempt to use relatively objective measures of diversity rather than subjective perceptions of diversity. Typically, the attributes of individual team members are assessed and used to create team-level statistical indicators that capture the degree of heterogeneity or dispersion present. For categorical attributes (such as gender and ethnicity), greater diversity is present when team members are equally distributed among the possible categories (e.g., a six-person team with three men and three women, or an eight-person team with two engineers, two artists, two salespeople, and two support staff). For attributes that vary along a continuum, such as age and tenure, diversity is greatest to the extent that members of a team are distributed between the highest and lowest values on the continuum.

The Complexity of Diversity

Work teams found in natural settings are likely to be most accurately described as highly diverse (heterogeneous) on some attributes and less diverse (homogeneous) on other attributes. For example, in our subject company (Jackson & Joshi, 2004; Joshi, Liao, & Jackson, 2006), sales teams were typically diverse in terms of gender and ethnicity. The company's staffing practices, however, ensured that sales teams were more homogeneous in education levels and organizational tenure.

Typically, researchers either fail to measure and/or do not report statistics for all of the many types of diversity that may be present in the work teams being investigated. In fact, for the studies we located, often results were reported for just two types of diversity. Gender and ethnic diversity were reported most often. Later in this chapter we present a more detailed description of the types of work team diversity that have been studied and the number of studies that have reported results for several types of team diversity. Those data show that there is a substantial body of evidence concerning the effects of readily detected diversity in work teams and relatively little evidence concerning the effects of underlying diversity in work teams.

The study of work team diversity is further complicated by the fact that attributes of the employees who work together in a team may be correlated. For example, shortly after the company that we studied adopted new recruiting practices aimed at attracting more ethnic minorities, the association between ethnicity and job tenure increased (Jackson & Joshi, 2004; Joshi, Liao, & Jackson, 2006). Likewise, after the company adopted promotion practices designed to increase the number of women in management ranks, the association between gender and job tenure rose in the managerial ranks. Also, throughout the company, older employees tended to have fewer years of formal education regardless of which jobs they held. When correlations such as these exist, it is difficult to determine the unique effects of different types of diversity.

Finally, note that most studies have focused on the main effects of work team diversity, and few studies have reported on the potential interaction effects among various types of diversity (e.g., Barrick, Stewart, Neubert, & Mount, 1998; Neuman, Wagner, & Christiansen, 1999). A study of 83 work teams in eight German organizations illustrated the value of studying such interaction effects: The results showed that teams consisting of employees with higher need for cognition (i.e., an intrinsic motivation for and enjoyment of cognitive activities) were more likely to reap the benefits of age and education diversity, compared with teams consisting of employees with lower need for cognition (Kearney, Gerbert, & Voelpel, 2009).

The complexity of diversity found in naturally occurring work teams, combined with overly simplistic approaches to measuring team diversity, makes it impossible to draw conclusions about whether the different types of diversity shown in Exhibit 20.1 are associated with differing team consequences. Therefore, we encourage scholars to be vigilant about measuring, evaluating, and reporting

the effects of as many types of diversity as is feasible when conducting their research.

For employers, the best advice we can offer concerning different types of diversity is to assume that not all types of diversity are created equal—some types of diversity may have greater potential benefits than other types, and some types may require more active management to avoid potentially disruptive consequences. We describe what is known about the consequences of various types of diversity later in this chapter. Before doing so, however, we briefly summarize the theoretical underpinnings of that empirical knowledge base.

THEORETICAL FOUNDATIONS OF RESEARCH ON WORK TEAM DIVERSITY

Several theoretical perspectives have informed the study of work team diversity. Not all of these theoretical perspectives were proposed with the primary objective of explaining the dynamics of diverse work teams. Some theories were developed to understand organization-level phenomena, and others focus on individual-level phenomena. Nevertheless, these theoretical perspectives have proved useful for informing diversity scholars of the various consequences of work team diversity. Together, they provide many useful insights into how, why, when, and where diversity influences work team processes and outcomes.

Attraction–Selection–Attrition Model

The attraction–selection–attrition (ASA) model (Schneider, 1987) is one of the most popular perspectives used to guide empirical investigations of work team diversity, perhaps because it recognizes diversity's double-edged consequences. (See also Vol. 3, chap. 1, this handbook.) Schneider and his colleagues have focused their efforts on understanding the dynamics that tend to cause whole organizations to become less diverse and more homogeneous over time, but the ASA model is invoked to explain the effects of work team diversity, too.

To describe the processes through which "the people make the place," Schneider argued that organizations naturally evolve toward greater social homogeneity because people prefer to be with others who are similar (Byrne, 1971). When looking for jobs, people are initially attracted to organizations that they believe are made up of people like themselves. When evaluating job applicants, organizational agents are more likely to form favorable impressions of applicants who seem to "fit" the organization. Once hired, perceptions of similarity continue to play a role: Employees who do not seem to fit in well are more likely to experience dissatisfaction and leave. These dynamics, unfolding year after year, gradually result in organizations that are more homogeneous than they would become through random processes (e.g., see Schneider, Smith, Taylor & Fleenor, 1998; Smith, 2008). Homogeneous organizations may function more smoothly as a consequence of the similarities shared by members, but there also are potential disadvantages, such as lack of creativity and an inability to adapt to changing circumstances.

The ASA model emphasizes the role of employees' personalities, values, and interests as forces that shape organizational life (Schneider, Goldstein, & Smith, 1995). However, some scholars have argued that ASA processes also explain the gradual demographic homogenization that occurs in organizations (Boone, van Olffen, van Witteloostuijn, & De Brabander, 2004; Jackson et al., 1991; Jackson & Chung, 2008).

For a Fortune 500 company such as the one we studied, the ASA perspective suggests that proactively increasing diversity within the firm may be necessary in order to contradict the natural drift toward homogeneity. At the same time, however, efforts to increase diversity may be at odds with the propensity of employees to be more attracted to and feel more comfortable working with people who are similar to them. Thus, work teams and the company as a whole may find that increasing diversity results in higher employee turnover and the various costs associated with replacing those who leave. This cost is worth paying if the organization reaps other benefits from diversity.

Organizational Demography Perspective

Diversity researchers also embrace the more sociological logic of Pfeffer's (1983) organizational demography model. In common with the ASA

model, employees' preferences for similarity provide the rationale for the relationship of the social composition of organizations with organizational phenomena. But in contrast to Schneider's focus on the behavior of individuals, Pfeffer emphasized organization-level constructs such as cohesiveness, communication patterns, and employee flows.

In place of psychological attributes such as personality and values, the organizational demography perspective highlights the importance of membership in social groups defined by attributes such as age, tenure, gender, and ethnicity. Sociological studies and marketing research have both shown that differences in people's attitudes and values are reliably associated with differences in their standing on demographic characteristics such as these. The demography perspective recognizes that people use the social cues of demographic attributes to inform their behavior toward others.

Understanding the effects of tenure cohorts in organizations has been a primary focus of studies of organizational demography (cf. Pfeffer, 1992). Research shows that tenure-based cohorts produce two types of effects in organizations: competition between cohort groups and solidarity within cohort groups. Relationships between and within tenure cohorts, in turn, have implications for outcomes such as cohesiveness and turnover. Wagner, Pfeffer, and O'Reilly (1984) argued that executives who joined a company at the same time were likely to develop similar values and patterns of communication. Consistent with this logic, they found that tenure diversity within top management teams was associated with higher turnover rates for the team. In a study of academic departments, McCain, O'Reilly, and Pfeffer (1983) assessed the extent to which department members could be clearly arrayed into distinct cohort sizes with clear gaps between the cohorts (e.g., a department with a group of long-tenured full professors and a group of short-tenured assistant professors versus a department with an array of professors across all levels of seniority). Departments with more clearly identifiable cohorts experienced more intergenerational conflict as well as higher rates of faculty resignations at senior and junior levels (McCain et al., 1983).

The organizational demography perspective has drawn attention primarily to tenure and age distributions in organizations, but the main principles of this theory are easily extended to understanding the consequences of cohorts based on other demographic characteristics, including gender, ethnicity, and educational background. The organizational-level dynamics that were of primary interest to Pfeffer (1983) also have been observed in smaller social units, including work teams (e.g., Jackson et al., 1991; Jackson & Joshi, 2004; Joshi et al., 2006; Joshi, 2006).

Social Identity Perspective

The social identity perspective encompasses social categorization theory and social identity theory (Reynolds, Turner, & Haslam, 2003). Fundamental to this perspective is the observation that individuals classify themselves and others based on overt demographic attributes, including ethnicity and gender (Ashforth & Mael, 1989; Tajfel & Turner, 1979). Demographically similar individuals classify themselves as members of the in-group; those who are demographically dissimilar are classified as the out-group. Such categorizations are fundamental to the way people understand and organize their social worlds (Hewstone, Rubin, & Willis, 2002). In-group/out-group dynamics play out even when group membership has been determined randomly on the basis of meaningless cues (Brewer & Brown, 1998).

Whereas the ASA model and the organizational demography perspective assume that "objective" similarity is of primary importance, the social identity perspective recognizes that similarity is socially constructed and specific to situations. People bring many attributes to each situation, but only those that become salient shape behavior.

Although many factors can influence which attributes and types of diversity become salient in a situation, the composition of the particular people present is the primary factor. For example, gender is more likely to be salient and the basis for in-group/out-group dynamics in mixed-gender (vs. single-gender) teams. By emphasizing that it is the particular mix of people in a situation that determines which types of diversity matter most, the social

identity perspective combines an understanding of individual-level processes with an appreciation for the role of social contexts (Chattopadhyay, Tluchowska, & George, 2004).

The social identity perspective serves as a reminder that diversity dynamics must be understood within the company's particular context. On the one hand, the basic dynamics of in-group/out-group relations is likely to be found in any organization, and within any department or work team. On the other hand, it would be wrong to assume that the same types of diversity are equally salient and influential in all teams or departments—even those in the same organization.

Information Processing Perspective

In contrast to the theoretical perspectives just described, the information processing perspective emphasizes the role of less visible attributes, such as knowledge and skills. The information processing perspective assumes that employees bring differing approaches and expertise to the decision-making activities in which most work teams engage; it focuses much more on task-oriented team activities, rather than affect-based relationships.

The information processing perspective assumes that task-oriented diversity can improve team decision making in a variety of ways: More diverse teams may search more broadly for information, consider more alternative solutions, and engage in more vigorous debate before reading a decision (e.g., see Jackson, 1992). Indeed, the mere presence of a minority opinion triggers greater exchange of unshared information within teams (Nemeth, 1986, 1997). The information processing perspective has informed numerous studies designed to assess the corporate performance consequences of diversity within top management teams (Bantel & Jackson, 1989; Eisenhardt & Schoonhoven, 1990). It is central to research on teams at the upper echelons of organizations (Finkelstein & Hambrick, 1996), and it also has stimulated research on decision making and performance in lower-level work teams (e.g., Jehn & Mannix, 2001). When organizations extol the potential value of work team diversity, they often draw on the logic of the information processing perspective.

Social Capital Theory

Social capital theory (sometimes referred to as *social networks theory*) also brings attention to social interactions that create value for individuals and groups (Lin, Ensel, & Vaughn, 1981). A work team's social capital consists of the actual and potential resources embedded within the network of team members' social and job-related relationships. Social capital theory suggests that work team diversity can be both detrimental and beneficial.

The potentially detrimental effects of diversity arise because diversity is likely to inhibit the development and use of social capital among team members, which is referred to as *internal social capital.* Reflecting the similarity–attraction effect, social networks tend to be homophilous; that is, social interactions occur more frequently among network members who share similar attributes (Marsden, 1990; McPherson, Smith-Lovin, & Cook, 2001). Homophilous exchanges are more stable than interactions among dissimilar individuals and are characterized by greater mutual trust (Brass, 1985; Marsden, 1990). In networks characterized by diversity, dense trusting relationships are less likely to develop.

Offsetting the disadvantage of diversity for developing a team's internal social capital are advantages that diversity brings to a team's network of relationships with people outside the team, which is referred to as the team's *external social capital.* Adopting an external perspective on team work highlights the important role of the relationships between team members and people outside the team boundary who contribute to the team's effectiveness (Ancona & Caldwell, 1992). For many work teams, effectiveness requires understanding how the team's work is situated in the organization. Coordinating with other teams, managing relationships with external stakeholders, and obtaining access to information and other valuable resources all may be needed to achieve the team's task (e.g., see Katz, Lazer, Arrow, & Contractor, 2004; Oh, Chung, & Labianca, 2004; Tsai & Ghoshal, 1998). For achieving task-related goals, a team's external social capital may be as valuable as its internal social capital.

As the foremost proponent of social capital theory, Burt (1992) argued that a person who bridges a

"structural hole" between two other unconnected actors is in an advantageous position because he or she can control the exchange of resources between the two actors. Diverse teams may be more likely to include such members. Assuming that the members of a team tend to have external connections to similar others, the external social capital of diverse teams should be greater than the external social capital of homogeneous teams. According to this perspective, diversity is a net benefit for work teams when it creates sufficiently valuable external social capital to offset the reduced internal social capital associated with diversity (Reagans & Zuckerman, 2001; Reagans, Zuckerman, & McEvily, 2004).

Social capital theory suggests that managing diversity effectively requires understanding how internal and external social capital can influence the performance of various work teams. For teams working on tasks that do not benefit from the team's external network of contacts, such as many production tasks, any internal conflicts associated with diversity may result in reduced team performance. However, for teams working on tasks that require coordination and interdependence with others outside the team, such as research and development (R&D) teams, the external social capital associated with diversity may be sufficient to offset any negative consequences of reduced internal social capital.

The value of external social capital for members of corporate boards was demonstrated in a study by Westphal and Milton (2000). They found that minority board members who had social ties with other board members based on common membership in other boards were more successful in exerting influence on their boards. These findings draw attention to the embeddedness of diversity-related outcomes in the larger socio-structural context.

The logic of social capital theory is consistent with the investments that major corporations have made in supporting diversity initiatives such as formal mentoring programs and caucus or affinity groups. Such programs encourage employees to build their networks of social and task-related connections across organizational levels and various other internal boundaries (Killian, Hukai, & McCarty, 2005; Noe, Greenberger, & Wang, 2002; Ragins & Kram, 2007).

Faultlines Perspective

The faultlines perspective is a relatively new approach to understanding the dynamics of work team diversity. According to this perspective, a complete understanding of diversity's consequences requires an understanding of the configuration of team members' attributes. Rather than attend to the degree or type of diversity present in work teams, the faultlines perspective asserts that differences among team members are most likely to have significant consequences when they elicit the formation of distinct subgroups (Lau & Murnighan, 1998). That is, the focus of faultlines theory is on the *structure* of diversity (cf., Jackson et al., 1995).

A fault line is said to exist in a team when two or more relatively homogeneous and distinct subgroups form on the basis of multiple shared attributes. For example, in a longitudinal study of internationally diverse student project teams, faultlines arose on the basis of differences in nationalities and education majors. In project teams where nationality and major covaried, the presence of strong faultlines disrupted information sharing and interfered with effective team performance (Jiang, Jackson, Shaw, & Chung, 2008). In another study of student teams, Polzer and colleagues showed that faultlines also influence the functioning of geographically distributed teams; they found that fault line effects were stronger when colocated subgroups were culturally homogeneous (Polzer, Crisp, Jarvenpaa, & Kim, 2006).

The distribution of team members' attributes partly determines the likelihood that faultlines will result in the formation of distinct subgroups. However, the likelihood that clear subgroups will be salient to team members and influence team dynamics also depends on other situational conditions, including the nature of the task. Imagine a six-person team of HR professionals with three older men and three younger women. This pattern of attributes sets the stage for a gender-based fault line to become salient. If the team is assigned to work on the development of a new family leave policy, the task would likely increase the likelihood that the fault line would shape how the team functions. However, if the same team were assigned to develop a new

recruiting plan, the faultline might be more likely to remain dormant.

Concluding Comments

No single theoretical perspective addresses the full array of affective and behavioral consequences associated with work team diversity. Scholars and managers alike can gain different insights from each perspective. Some theoretical perspectives emphasize the fact that people tend to be attracted to similar others; some focus attention on the role of task-related resources, such as skills and knowledge; some point out the importance of looking at team members' external connections, and some emphasize the fact that work teams can be influenced by the formation of competing subgroups. Despite such differences, these perspectives all assume that the types and distribution of personal attributes among members partly determine how work teams function and, ultimately, how well they perform.

Future work that addresses the differing conceptual underpinnings of past research could advance our understanding of how diversity affects the daily lives of employees and organizations (Jackson & Chung, 2008). Integrating the various models and perspectives will require attending to interpersonal processes that play out at each of several levels of analysis, including the individual, dyads, teams, and larger organizations (e.g., Boone et al., 2004; Jackson et. al, 1991). Some initial steps in this direction have already been taken (e.g., Joshi, Liao, & Jackson, 2006; Hutlin & Szulkin, 1999), and we are optimistic that continued theoretical integration will occur as this area of research continues to develop.

REVIEW OF EMPIRICAL RESEARCH ON THE CONSEQUENCES OF WORK TEAM DIVERSITY

We turn next to a review of the empirical research on work team diversity, focusing on studies that investigated diversity's potential consequences. This review includes studies that assessed the relationships between several types of diversity and its short-term consequences for work team processes as well as longer-term consequences for work team performance.

To locate relevant studies, we searched several electronic sources (PsycINFO, ABI/INFORM and EBSCO Academic, and SocIndex) and manually searched the primary journal outlets for research on work team diversity (e.g., *Journal of Applied Psychology, Personnel Psychology, Academy of Management Journal, Administrative Science Quarterly*) using a variety of relevant key terms and phrases (e.g., *workplace diversity, team diversity, group demography, organizational demography, work team composition*). We also contacted prominent diversity researchers and invited them to share their working papers and forthcoming journal articles. These searches yielded 88 articles that reported 487 diversity–consequence relationships. The majority of studies were conducted within the United States. Increasingly, scholars in other countries also are becoming interested in the issue of workplace diversity, but there is not yet sufficient evidence to make any cross-cultural comparisons of work in this field.

Table 20.1 provides a summary of the types of research published on work team diversity during the past 15 years. Listed in the left column of Table 20.1 are the types of diversity that have been studied most. The next three columns show the number (percentage) of studies that investigated each of three broad categories of consequences: affective and attitudinal responses (e.g., cohesion, conflict, commitment, satisfaction), behavioral processes (e.g., communication, use of information, learning behavior, turnover), and performance (e.g., achievement of team goals and other indicators of effectiveness). Table 20.1 shows that many types of work team diversity have been investigated in organizational settings, with the greatest accumulation of evidence pertaining to readily detected types of diversity and their relationship to performance. As this table reveals, the combination of several types of diversity and several potential consequences of interest means that a very large number of studies will be needed before we can draw firm conclusions about all of the possible empirical relationships. Here we focus on those relationships for which the most data are available, while cautioning readers that firm conclusions should be drawn only after additional research has been conducted.

TABLE 20.1

Overview of Research Conducted by Types of Diversity Attributes and Types of Consequences

	Types of consequences[a]		
Type of diversity[b]	**Affect or attitude**	**Behavior**	**Performance**
Race/ethnicity (16%)	18 (24%)	23 (30%)	35 (46%)
Gender (15%)	26 (35%)	18 (24%)	31 (41%)
Functional background (11%)	7 (12%)	20 (35%)	31 (54%)
Age (10%)	18 (36%)	7 (14%)	25 (50%)
Cognitive/mental model (10%)	11 (22%)	19 (39%)	19 (39%)
Tenure (9%)	14 (33%)	8 (19%)	20 (48%)
Cultural values (7%)	17 (53%)	11 (34%)	4 (13%)
Education level (5%)	13 (52%)	2 (8%)	10 (40%)
Composite measure (4%)	1 (5%)	8 (40%)	11 (55%)
Fault lines (4%)	12 (63%)	5 (26%)	2 (11%)
Nationality (3%)	2 (13%)	6 (38%)	8 (50%)
Personality (3%)	2 (14%)	3 (21%)	9 (64%)
Others (3%)[c]	3 (27%)	1 (9%)	7 (64%)
Total $N = 487$[d]	212 (44%)	131 (27%)	

[a]Proportion (%) of effects out of 487 for each type of outcome listed is shown in parentheses.
[b]Proportion (%) of effects reported out of 487 for the type of diversity listed is shown in parentheses.
[c]Marital status based diversity, network density, geographic diversity, experience diversity.
[d]A total of 88 studies were selected for review, which included 487 reported effects that were coded for this analysis.

Communication Patterns

Communication processes are fundamental to accomplishing things in organizations. (See also Vol. 3, chap. 7, this handbook.) Thus, the question of whether and how the composition of work teams influences communication patterns is of long-standing interest to those who study organizations.

March and Simon (1958) noted that the frequency of communication between two people creates a shared language that enhances the efficiency of their communications. For work teams, efficient communication is considered a critical antecedent of performance (Katz, 1982), and several researchers have formulated models of how work team diversity might influence team communications (Elsass & Graves, 1997; Larkey, 1996).

The ASA model, social identity theory, and social capital theory all suggest that work team diversity is likely to impede frequent and effective communication among team members, while team homogeneity should facilitate effective communication. The results of several studies support these predictions for various types of diversity.

Hoffman (1985) examined the effects of ethnic minority representation within the supervisory ranks on interpersonal, organizational, and inter-organizational communication frequency. Consistent with the expected effects of dissimilarity, Hoffman's 1985 study of 96 state agencies found that higher percentages of minority representation were associated with lower frequency of informal interpersonal communication. Furthermore, in the more diverse agencies, the reduced frequency of informal communications was offset by higher frequency of formal organizational communication.

In their seminal study of engineering project teams in the research division of a medium-sized firm based in the United States, Zenger and Lawrence (1989) hypothesized that team members who were similar in age and tenure would share common attitudes and values and thus would communicate more frequently with each other than with dissimilar team members. The results revealed that age (but not tenure) similarity was significantly related to the frequency of technical communications among team members.

Studies of communication networks also show that communications tend to occur more frequently

between similar members. Ibarra's 1992 study of male and female managers in an advertising firm found that men tended to form same-gender network connections that served both social and instrumental goals. Women's network connections were characterized by greater gender diversity, however, perhaps because fewer women were employed in the organization and connections with other women were less easily established (Ibarra, 1992). A study of the friendship networks of MBA students found that students formed friendships with others from similar ethnic backgrounds (Mehra et al., 1998).

In a study of teams working on national service projects, Klein, Lim, Saltz, and Mayer (2004) found that team members who were more similar to others in the team were also more central in the team's advice and friendship networks.

As discussed earlier, the social capital perspective recognizes that the organizational embeddedness of work teams has important implications for the effects of team diversity on external communications (see Joshi, 2006). In their study of R&D teams, Zenger and Lawrence (1989) found that engineers' communications with people outside the team often occurred with people who entered the organization at about the same time. Consistent with the organizational demography perspective, the relationships formed among members of a tenure cohort apparently served to bind together cohort members even if their job assignments dispersed them into different areas of the organization.

In a study of R&D teams, Reagans and Zuckerman (2001) found that demographic diversity negatively influenced internal team communication, but diversity was positively associated with greater external communication. The study also showed that the external communication networks of work teams contributed positively to team performance. Ancona and Caldwell (1992) found that functional diversity (but not tenure diversity) predicted the frequency of teams' external communication. Corroborating this finding, Keller (2001) reported that functionally diverse teams had more external communication and that external communication, in turn, was associated with better team performance on dimensions such as technical quality, timeliness, and staying within budget.

The accumulated evidence clearly indicates that work team diversity influences communication behaviors in ways that may be detrimental to internal team dynamics yet beneficial to a team's external relationships and team performance. Thus, for a particular team, the longer term performance consequences of team diversity may partly depend on the relative need for effective internal and external communication. For teams working on highly interdependent tasks that require speedy and efficient communication, activities that build internal cohesiveness and training that addresses the potentially negative effects of diversity on communication may be particularly helpful. On the other hand, when performance is more dependent on the team's ability to manage external relationships, it may be useful to ensure that team members understand the importance of such external relations and the ways in which their diversity can contribute to team performance. Because information sharing is of increasing importance to organizations that compete on the basis of knowledge (see Jackson, Hitt, & DeNisi, 2003; Jackson & Hong, 2008), research that helps to unravel the specific ways in which diversity influences communication is sorely needed.

Conflict

Two types of conflict that arise in teams are *task conflict* and *emotional conflict*. (See also Vol. 3, chap. 13, this handbook.) Task conflict involves disagreements about the work itself, while emotional conflict involves frustration and anger related to dealing with team members. According to the information processing perspective, conflict is a mediating process that provides an explanation for observed relationships between various types of diversity and both longer term positive outcomes, such as improved team performance, and longer term negative outcomes, such as increased turnover (Jehn, Northcraft, & Neale, 1999; Pelled, Eisenhardt, & Xin, 1999).

Task conflict is likely to arise when team members bring differing knowledge, expertise and, experience to bear on task completion. Presumably, task conflict can be beneficial to team performance, for it is through their attempts to resolve such conflict that team members are likely to find creative and effective solutions. Consistent with this view, Bowers,

Pharmer, and Salas (2000) found that diversity and performance were more strongly related for complex tasks and less strongly related for simple tasks.

Emotional conflict is generally something people prefer to avoid, if possible—it is seldom constructive and can be distressing for some individuals. Because emotional conflict is unrelated to a team's task, it presumably provides no performance benefits. Jehn and her colleagues argued that relationship-oriented (ethnic and gender) diversity should be more likely to elicit emotional conflict, whereas task-based (functional background and education) diversity should be more likely to elicit task conflict (Jehn, 1995; Jehn et al., 1999). Support for these arguments has been mixed. In a study of employees in a household goods moving firm, functional diversity was associated with greater task conflict and unrelated to emotional conflict, as expected. Also, gender and age diversity were positively associated with emotional conflict but not task conflict (Jehn et al., 1999). Somewhat different results were found in a study of 45 work teams in the electronics industry. As predicted, both ethnic and tenure diversity were positively associated with emotional conflict; however, contrary to predictions, gender diversity was unrelated to emotional conflict. Also as predicted, functional diversity was positively related to task conflict but, contrary to their predictions, tenure diversity was unrelated to task conflict (Pelled et al., 1999). Other studies also have failed to provide consistent support for the predicted relationships between the different types of diversity and conflict (e.g., Pelled, 1996; see De Dreu & Weingart, 2003, for an overview).

Several situational conditions have been shown to reduce the likelihood that relationship-oriented diversity will result in emotional conflict. A strong team orientation is one condition that appears to neutralize the negative effects of gender diversity on relationship conflict (Mohammed & Angell, 2004). Team longevity also plays a role. In newly formed teams, readily detected diversity such as gender and ethnicity may elicit conflict; for long-lived teams, diversity in underlying attributes, such as values and personality, are more predictive of how much conflict teams experience (Harrison et al., 1998; see also Pelled et al., 1999).

Task characteristics can also moderate the effects of diversity. Pelled et al. (1999) considered task routineness as a moderator of the relationship between diversity and both emotional and task conflict. Their findings showed that the effect of functional diversity on task conflict was weaker for teams working on more routine tasks; also, the effects of ethnicity and tenure diversity on emotional conflict were weaker for more routine tasks.

Although findings about the effects of task routineness (vs. complexity) are somewhat mixed, there is an emerging consensus that the effects of diversity on team conflict depend on the nature of the team's task. In general, diversity is more likely to engender emotional conflict in teams working on tasks characterized by greater uncertainty and autonomy; by comparison, the effects of diversity on task conflict are not yet clear (De Dreu & Weingart, 2003; Molleman, 2005).

In other efforts to understand the mixed findings concerning the relationship between team diversity and conflict, scholars have recently turned to the faultlines perspective. In a study of 71 international joint venture teams, Li and Hambrick (2005) found that strong demographic faultlines in joint venture teams led to higher levels of emotional and task conflict, and such conflict was associated with poor joint venture performance. To date, few field studies provide evidence about the relationship between demographic faultlines and team conflict. Laboratory studies indicate that faultlines theory holds some promise, however. Molleman (2005) examined the effects of demographic-, ability-, and personality-based faultlines on team conflict. In a sample of 99 undergraduate student teams, the strength and depth of demographically defined faultlines (but not faultlines defined by personality or ability) were directly associated with internal team conflict. When task characteristics were taken into account, the study revealed that personality and ability faultlines also were associated with internal team conflict, but only under conditions of high autonomy.

Despite many years of research on the relationship between diversity and various types of team conflict, scholars' understanding of the relationship between team diversity and team conflict remains somewhat limited. Many competing theories have

been offered, and these are matched by an array of contradictory empirical findings (for a complete review, see Jehn, Greer, & Rupert, 2008). This state of affairs may be disheartening for scholars seeking to explain the causes of team conflict. However, for managers, the research to date suggests that they need not be overly concerned about the possibility that increased diversity in teams will be associated with disruptive team conflict.

Social Cohesion, Commitment, and Turnover

The ASA, organizational demography, social identity, and social capital perspectives all predict that more diverse teams are likely to experience less positive affect. Decades of research on similarity and attraction indicate that people tend to dislike dissimilar others, all else being equal. By extension, it has been argued that diversity is likely to have negative consequences for affective reactions such as social cohesion and commitment (e.g., see Pfeffer, 1983), and as a result of weak social relationships, turnover rates are likely to be higher for diverse teams (Schneider, 1987). (See also Vol. 2, chap. 11, and Vol. 3, chaps. 1 and 4, this handbook.)

The empirical results generally support the conclusion that people working in social settings characterized by various types of diversity experience weaker feelings of commitment and related affective reactions, while employee turnover rates are higher in such settings (e.g., Mueller, Finley, Iverson, & Price, 1999; McCain, O'Reilly, & Pfeffer, 1983; O'Reilly, Caldwell, & Barnett, 1989; Tsui, Egan, & O'Reilly, 1992; Wagner, Pfeffer, & O'Reilly, 1984). For example, in a study of 93 top management teams in the banking industry, Jackson and colleagues (1991) found that teams with greater diversity in terms of education, tenure, and industry experience had higher turnover rates within the executive ranks. Only a few studies have found no relationships (e.g., Iaquinto & Fredrickson, 1997) or quite weak relationships (Godthelp & Glunk, 2003) between team diversity and outcomes such as commitment and turnover.

Much of the available data on which this conclusion rests come from studies of top-level management teams, and the effects of some types of diversity—especially gender and ethnic diversity—have been difficult to establish for such teams. As more women and ethnic minorities move into the executive ranks, additional research will be needed to determine how these types of diversity influence the affective responses of top management teams. In addition, the relationship between team diversity and these outcomes is sometimes more complex than predicted by most theoretical perspectives (e.g., see Schippers, Den Hartog, Koopman, & Wienk, 2003).

For increasingly diverse organizations, a conclusion to be drawn is that proactive measures may be needed to avoid the potential problem of increased rates of turnover. We caution managers not to make assumptions about who is most likely to leave in response to increasing diversity, however. If one accepts the logic of the ASA model, one might expect those who are in the minority to be the most likely to leave because they would be least likely to feel that they fit in well (Sacco & Schmitt, 2005; Zatnick, Elvira, & Cohen, 2003). At least a few studies have found that this is not the case. Jackson et al. (1991) found that diverse teams had more turnover, but the characteristics of individual team members did not predict the likelihood of their leaving. Tsui et al. (1992) found that majority group members (males and Caucasians) were more likely to have negative reactions to team diversity, in comparison with minority group members. Findings such as these suggest that employers who aim diversity management initiatives (such as mentoring programs and affinity networks) primarily at minority group members may be inadvertently aiming their solutions at the wrong targets. Diversity initiatives that result in an overall improved diversity climate within organizations may be as effective in reducing the negative reactions of majority group members (e.g., Caucasian men) as they are for improving retention of minorities and women (McKay et al., 2007).

Creativity and Innovation

The competitive landscape of the early 21st century challenges firms to continually change and adapt to external trends and events, such as increasing globalization, new technologies, and shifting political and economic conditions. To succeed in this environment requires the capacity for creativity and innovation, as these are the processes through which firms create

new products, improve their services, and reduce their costs. (See also chap. 9, this volume.) Thus, understanding the conditions that facilitate creativity and innovation in work teams has been a high priority among scholars. The changing demographics of the relevant workforce make the question of how diversity influences these processes especially important.

Within the United States, R&D teams have become increasingly diverse in recent years as the proportion of female, non-White, and foreign scientists in the workforce has risen. According to the National Science Foundation (2004), more than one of four recipients of American doctoral degrees in science and engineering are neither U.S. citizens nor permanent residents. Moreover, women and non-Whites, respectively, now account for about 33% of all doctorates awarded in science and engineering, double the percentages of 25 years ago. If these trends continue, the science and engineering workforce in the U.S. will soon include more people of color and women than White men. At the same time, various organizational changes are increasing other types of diversity in R&D teams. Compared with the past, today's R&D teams are more likely to include some people with specialized knowledge in areas other than the basic sciences and engineering—such as sales, marketing, and finance—and even team members who are employed by a firm's strategic partners (Huston & Sakkab, 2006). Furthermore, studies have found that the effectiveness of R&D teams is influenced by social and task-related communication (Dailey, 1978; Keller, Julian, & Kedia, 1996; Pirola-Merlo, Hartel, Mann, & Hirst, 2002; Van den Bulte & Moenaert, 1998).

According to the information processing perspective, diversity in attributes associated with task-related knowledge and expertise can provide teams with valuable information and alternative approaches to problem solving. According to social capital theory, relations-oriented diversity also may promote team creativity and innovation, by providing more external connections through which the team can obtain needed knowledge and resources (Oh et al., 2004). Among managers, too, work team diversity is widely believed to be conducive to creative problem solving and innovation, and this belief is supported by studies conducted in laboratory settings (McGrath, 1984; Shaw, 1981).

Consistent with the information processing perspective, studies of top management teams have found that diversity on task-related attributes such as educational specialization and functional background predict innovative organizational practices and adaptation to change (Bantel & Jackson, 1989; Wiersema & Bantel, 1992). The results of studies involving lower level teams have been mixed, however: Sometimes diversity has been associated with improved information use and problem solving (Frink et al., 2003; Hirschfeld, Jordan, Feild, Giles, & Armenakis, 2005), while at other times diversity has been associated with disruptive processes that have negative consequences for creativity and problem solving (Pelled et al., 1999; Randel, 2002).

In an attempt to resolve such inconsistent results, Reagans et al. (2004) drew on social capital theory to unpack the multitude of ways through which diversity can promote creativity and innovation. By analyzing the effects of team diversity on both internal and external social capital, Reagans et al. showed that the overall impact of task-oriented diversity in R&D teams is explained by a combination of the negative impact of diversity on internal team dynamics and the positive impact of diversity on the team's external social network.

In another effort to explain the mixed findings relating team diversity to innovation, Pearsall and colleagues (2008) applied the faultlines perspective. In an experimental setting, they found that gender diversity was disruptive when gender faultlines were activated by a gender-conscious task; gender diversity had positive consequences for creativity when teams performed a gender-neutral task (Pearsall, Ellis, & Evans, 2008). A longitudinal study of student project teams by Jiang and his colleagues also employed faultlines theory to explain how team diversity could interfere with performance on a task that required creativity and innovation (Jiang, Jackson, Shaw, & Chung, 2008). Jiang et al. (2008) argued that diversity would have negative consequences when it resulted in faultlines that disrupted information sharing and informal socializing within the team. Their results showed that task-based faultlines were detrimental to information sharing and team performance, while relations-oriented faultlines

were detrimental to informal socializing but not team performance.

For organizations that face volatile environmental forces that demand effective responses, understanding creativity and innovation is essential to long-term survival. The increasingly diverse workforce of today's organizations may prove to be an unanticipated opportunity for meeting this challenge. However, as recent research on team faultlines shows, the mere presence of diversity does not guarantee the blossoming of creativity and innovation. When the presence of diversity inadvertently results in the presence of strong faultlines, it may interfere with rather than support effective problem solving. One implication is that organizations may find it useful to conduct faultline audits when staffing R&D teams in order to reduce the likelihood that disruptive faultlines are present in those teams. In organizations that employ many such teams, attending to the composition of teams when making staffing decisions may prove to be more efficient than relying on diversity training or other interventions designed to overcome the potential negative consequences of faultlines (e.g., see Kulik & Roberson, 2008b).

Team Performance

In our discussion of innovation and creativity, we described results from studies of work teams charged with identifying, creating, and developing something new—new products, new services, and/or new means of production and administration. In this section, we consider studies that assessed team performance for other types of tasks. As noted by others (Jackson et al., 2003; van Knippenberg & Schippers, 2007), the results of such studies have been mixed.

In a study of manufacturing teams that assessed team performance using measures of both productivity (output) and customer service ratings, ethnic diversity was found to be negatively related to performance (Kirkman, Tesluk, & Rosen, 2004), but this result has not been found in other work settings (e.g., Kochan et al., 2003). Studies of gender diversity have found its effects on performance are sometimes positive (Rentsch & Klimoski, 2001), sometimes negative (Jehn & Bezrukova, 2003), and sometimes not significant (Watson, Johnson, & Merritt, 1998). Likewise, the results from studies of age diversity are mixed. Some studies have reported positive relationships between age diversity and team performance (Kilduff, Angelmar, & Mehra, 2000), whereas others have reported nonsignificant relationships (Simons, Pelled, & Smith, 1999; Bunderson & Sutcliffe, 2002) or negative relationships (Ely, 2004).

Scholars have adopted several approaches in trying to understand these mixed findings. One common assertion is that the problem of mixed results is caused by measuring readily detected types of diversity instead of underlying types of diversity (e.g., see Lawrence, 1997). This criticism rests on the assumption that psychological differences among team members are the proximal causes of any effects attributed to demographic diversity. However, the effects of psychological diversity also are unclear. For example, in one study of 82 work teams in a large retail organization, team performance was positively related to diversity on two of the Big Five personality dimensions (Extraversion and Emotional Stability) but unrelated on the other three (Neuman, Wagner, & Christiansen, 1999).

Another explanation for the mixed findings concerning team diversity and team performance is that the effect of any one type of diversity depends on the other types of diversity present in the team. In a study of 365 sales teams (Jackson & Joshi, 2004), team performance was defined as the average of team members' actual sales compared with their assigned sales goals. In the organization studied, sales goals were carefully calculated to take into account the specific products that were being sold (e.g., type of equipment or service), characteristics of sales territories (e.g., geographic scope, density), and characteristics of clients' accounts (e.g., size). The company's method of measuring performance permitted it to directly compare the performance across individuals and across teams, even though they were selling different products in different locations. Jackson and Joshi (2004) found that the effects on performance of several types of diversity—gender, ethnic, or tenure diversity—depended on the other types of diversity present in the team. Their most striking finding was that team performance was lowest for teams with a combination of relatively high tenure diversity *and* high gender diversity *and* high ethnic diversity.

Likewise, in a study of the effects of diversity in a household goods moving firm on supervisor-rated and archival performance measures, Jehn et al. (1999) showed that the effects on performance of task-oriented (education, function, and position in the firm) diversity depended on the degree of relations-oriented (gender and age) diversity present in teams. Task-oriented diversity was associated with better performance only when social category diversity was low.

Differences in the types of tasks performed by the teams are another possible explanation for the inconsistent results found across studies (Jackson, 1992). In a study of 4,538 tax employees working in 222 work units, the relationship between age diversity and performance depended on the degree of complex decision making required in the work units. Age diversity improved performance only for those units working on relatively more complex tasks (Wegge, Roth, Kanfer, Neubach, & Schmitt, 2008).

In their continuing efforts to understand the conditions under which various types of team diversity influence team performance, scholars have also examined the role of other team level moderators. We discuss those research efforts later in this chapter.

Concluding Comments

During the past decade, research on work team diversity has begun to mature. Dozens of studies have examined the relationship between various types of work team diversity and a variety of outcomes. However, because of the large number of possible effects to consider (due to the many types of diversity and outcomes of interest), additional research is still needed. With dozens of studies to consider, can we draw any tentative conclusions about the consequences of work team diversity? We believe the answer is yes. At least for the more frequently studied dimensions of demographic diversity, the findings are beginning to converge.

Relations-oriented diversity. On the basis of the available field evidence, one tentative conclusion we draw is that relations-oriented diversity in work teams is often (but not always) of little consequence—at least for the work team outcomes that have been examined to date. Overall, more than 50% of the reported effect sizes for ethnicity, gender, and age diversity reviewed by Joshi and Roh (2007) were nonsignificant. A meta-analytic review of 22 reported effects estimated that the average effect size for the relationship between relations-oriented diversity and social integration is −.02 (Horwitz & Horwitz, 2007). A meta-analytic review of 69 reported effects estimated that the relationship between relations-oriented diversity and team performance is −.03 (Joshi & Roh, 2009).

Although relations-oriented diversity is sometimes benign, it appears to be disruptive under some specific conditions. Focusing on the relationship between team diversity and team performance outcomes, Joshi and Roh (2009) investigated a variety of potential moderating conditions in an effort to uncover explanations for the variation in reported effect sizes. Their analyses indicated that the consequences of relations-oriented team diversity depend in part on the contextual factor of occupational demography. In occupations that were male-dominated, the average effect size for the relationship between gender diversity and team performance was negative (−.09). But in occupations that were gender balanced, the average effect size for the relationship between gender diversity and team performance was positive (.11). A similar pattern was found for race/ethnic diversity. For occupations in which the majority was White, the average effect size for the relationship between racial/ethnic diversity and team performance was negative (−.07). But in occupations that were racially/ethnically balanced, the average effect size for the relationship between race/ethnic diversity and team performance was positive (.11). Likewise, age diversity was more strongly associated with lower performance in occupational settings in which the majority of workers were relatively young (−.08), compared with settings in which employees ages were more balanced (−.05). Results such as these indicate that the consequences of team diversity depend partly on the degree of diversity within the larger contextual setting. For managers, such findings suggest that relations-oriented team diversity may be associated with some negative outcomes if the work teams are islands of diversity struggling to succeed in a sea of homogeneity. But

when the sea (i.e., the organization's larger workforce) also is diverse, diverse teams are less likely to suffer from disruptive social relationships.

Task-oriented diversity. Regarding task-oriented diversity, the preponderance of evidence indicates that diversity on characteristics such as functional background, education, and job or organizational tenure is often likely to be beneficial for team performance. That is, many organizations appear to reap the often-claimed benefits of task-related diversity. The performance benefits of task-oriented diversity can apparently be enjoyed despite any negative effects that such diversity might have on social relationships among team members. A meta-analytic review of 15 effect sizes by Horwitz and Horwitz (2007) revealed a negative average relationship between task-related diversity and social integration of −.04. On the other hand, a meta-analytic review of 48 effect sizes by Joshi and Roh (2009) revealed a positive average relationship between task-related diversity and team performance. More specifically, they found that functional diversity had the strongest positive relationship with team performance (.13), followed by tenure diversity (.03) and educational diversity (−.02).

What do these findings mean for employers? Is the glass half empty or half full? We believe the message is that employers should make no assumptions about how diversity influences work teams in a particular organization. Instead, employers are advised to examine the effects of specific types of diversity for the specific outcomes of most interest to the organization. The evidence clearly shows that diversity *can* have positive and/or negative consequences. Whether diversity is beneficial or problematic depends on the type of diversity, the nature of the team task, the specific team consequences of interest, and other local organizational conditions. By conducting organization-specific analyses, employers can learn which types of diversity are most beneficial in a particular organization and can identify any types of diversity that they may need to manage more effectively.

EMERGING AND FUTURE RESEARCH DIRECTIONS

The growing body of evidence suggests that the consequences of work team diversity are difficult to predict. Although much of the research summarized here was motivated by a desire to link work team diversity to attitudes and behaviors that influence performance, the results reveal a complex picture of reality. In this section we make an effort to deal with this complexity by proposing various approaches that researchers can take to unravel and thereby better understand the effects of diversity in organizations. Here we consider promising new approaches that incorporate more complex conceptualizations of diversity, draw on new theoretical perspectives, and comment on multilevel and context-sensitive perspectives for understanding the effects of work team diversity.

Understanding Types of Diversity

Scholars who approach the study of diversity using the lens of psychology often assume that using readily detected attributes to assess diversity (e.g., age, tenure, educational background, ethnicity) is just a methodological shortcut for assessing variations in individual attitudes, values, beliefs, and/or work-related knowledge. For some readily detected attributes, empirical evidence shows they are indeed related to psychological differences in attitudes, values, and so on. For example, age has been shown to be negatively correlated with risk-taking propensity (Vroom & Pahl, 1971) and approaches to problem solving (Datan, Rodeheaver, & Hughes, 1987). Also, societal conditions (e.g., economic depressions vs. booms and periods of war vs. peace) that are associated with different age cohorts appear to influence the attitudes and values of people who grew up during those eras (see Elder, 1974, 1975; Thernstrom, 1973). Regarding tenure, the evidence shows that executives tend to become more committed to the status quo the longer they stay in the same organization (Finkelstein & Hambrick, 1990; Hambrick, Geletkanycz, & Fredrickson, 1990). It is not surprising that educational curriculum choices are associated with personality, attitudes, and cognitive styles (Holland, 1976).

Due partly to criticisms of studies that assessed only demographic attributes (e.g., Lawrence, 1997), research on work team diversity increasingly includes psychological measures (e.g. Barrick, Stewart, Neubert, & Mount, 1998; Harrison, Price,

Gavin, & Florey, 2002; Klein, Lim, Saltz, & Mayer, 2004). Such studies shed light on the effects of psychological diversity, but they too yield an incomplete picture of diversity dynamics, because demographic differences are important in and of themselves. Perceptions of in-group and out-group status often reflect nominal categorical differences. Simply knowing that another person is similar—for example, knowing that the person belongs to one's own demographic group—is sufficient to trigger in-group categorization and cooperation (Oakes, Haslam, & Turner, 1994).

Including measures of both underlying (psychological) diversity and readily detected diversity presents an opportunity for gaining new insights about the effects of work team diversity; emphasizing one type of diversity over others may lead to inaccurate conclusions about which types of diversity are most consequential (Jackson & Chung, 2008). The potential value of the combined approach was demonstrated in a study by Harrison et al. (2002), which found that readily detected diversity influenced team functioning when teams had little experience together, but over time psychological diversity was more influential. Changes in perceived similarity are one explanation for the moderating effect of how long team members had worked together (e.g., see Zellner-Bruhn, Maloney, Bhappu, & Salvador, 2008). New theoretical models as well as new empirical studies that incorporate both demographic and psychological attributes are needed in order to fully understand how the complex array of differences among employees influences the workplace.

Understanding the Structure of Diversity

For a variety of reasons, many studies of diversity have focused on one or two aspects of diversity (e.g., ethnicity or gender or conscientiousness), and few studies have controlled for the many possible intercorrelations among attributes. Regardless of whether one's focus is on demographic diversity, psychological diversity, or their combination, the structure of diversity in any situation reflects the complex attribute profiles of individuals (Jackson et al., 1995).

Studies of multidimensional diversity illustrate the value of assessing multiattribute profiles, instead of focusing on one particular type of diversity. For example, Jehn and colleagues (1999) found that informational (education and function) diversity was negatively related to team efficiency when relations-oriented (gender and age) diversity was high, but not when it was low. Pelled et al. (1999) also found that the consequences of diversity for team conflict were best understood by taking into account interactive effects among multiple types of diversity. In a study of sales team performance, Jackson and Joshi (2004) found that the effects on team performance of any one type of diversity—gender, ethnic, or tenure diversity—depended on the other types of diversity present in the team.

Calling for a multidimensional approach to assessing the diversity of social units is no longer new (see, e.g., Cannella, Park, & Lee, 2008; Lau & Murnighan, 1998; Jackson & Joshi, 2001; Ofori-Dankwa & Julian, 2002), yet progress in this direction has been slow. The need for large samples and disagreements about how to test for multidimensional effects are among the barriers to progress. Lack of relevant theoretical guidance has played a role, too.

Fortunately, the introduction of group faultlines theory is stimulating new ideas about how to measure multidimensional diversity. In particular, we note that Shaw and his colleagues (see Shaw, 2004; Chung, Jackson, & Shaw, 2005; Jiang et al., 2008) have developed a measure of faultline strength that takes into account both internal alignment within subgroups and differences between subgroups. In comparison with other faultline measures that have been used in field research (e.g., Li & Hambrick, 2005; Thatcher, Jehn, and Zanutto, 2003), Shaw's measure is designed to fully capture the two aspects of faultlines identified by Lau and Murnighan (1998)—degree of homogeneity among members of subgroups and degree of dissimilarity between subgroups. The question of how to measure faultlines is not yet resolved, but the accumulating evidence suggests that strong faultlines create conflict and interfere with team performance. In contrast, weak faultlines may stimulate group learning.

Understanding the Roles of Social Status and Dominance

In most U.S. organizations, men and Whites enjoy higher status than women and people of color

(Baron & Newman, 1990). Status differences have many consequences, including the way people respond to work team diversity. In organizations, those with higher status are more sensitive to the degree to which they are in the majority (Tsui et al., 1992). People with high-status social identities, even when they are in the numerical minority, tend to maintain identification with their demographic in-group, which bolsters their self-esteem and insulates them from the negative effects of their minority position (Hewstone et al., 2002; Tajfel & Turner, 1985). People with low-status social identities tend to accept their "inferior" positions and are less likely to display discriminatory behavior against higher status out-group members even when their own proportions increase (Sachdev & Bourhis, 1985, 1987, 1991).

Two perspectives that shed additional light on the role of status are social dominance and system justification. These perspectives recognize that all societies are hierarchically organized. Some social groups enjoy dominant positions and others are relegated to subordinate positions. Furthermore, individuals belonging to the dominant and subordinate groups often endorse legitimating myths that provide justification for social hierarchies (Sidanius & Pratto, 1999). Conscious or unconscious internalization of these group-based hierarchies results in behaviors that reinforce the unequal distribution of power and resources (Sidanius, 1993).

Proponents of social dominance theory argue that social dominance orientation (SDO), which is "a generalized tendency to support existing hierarchical relationships between groups" (Haley & Sidanius, 2006, p. 659), motivates political attitudes. A significant body of evidence shows that SDO is associated with racism and attitudes toward race-conscious policies such as affirmative action. Introducing this individual difference into studies of workplace diversity may improve our understanding of the conditions under which diversity has workplace consequences.

Whereas the social dominance perspective focuses on the motivations of those in dominant positions, systems justification theory considers the internalization and perpetuation of social hierarchies by members of subordinate groups (Jost & Banaji, 1994). Jost and colleagues found that low-status group members were much more likely to exhibit out-group favoritism; favoring of out-group members occurred much less among high-status group members. Out-group favoritism, in turn, was associated with the lower levels of self-esteem found among low-status members (Jost, Pelham, & Carvallo, 2002). Such findings suggest that the social dominance and systems justification perspectives may prove illuminating when applied in future research aimed at understanding work team diversity.

Understanding Contextual Conditions

In their continuing attempts to understand the complex pattern of findings regarding how diversity influences work teams, some diversity researchers have begun to examine context as a potential moderator of diversity effects (see Joshi & Roh, 2007, for a detailed review). In testing their theoretical arguments meta-analytically, Joshi and Roh (2009) found that weak direct relationships may be obscuring the specific conditions under which diversity can have beneficial or detrimental effects on performance outcomes. Their findings revealed that after accounting for moderating contextual variables at multiple levels, diversity effects doubled or tripled in size. In this line of research, team, organizational, and even extraorganizational contexts are viewed as influences that partially determine whether diversity is likely to be associated with positive, negative, or no consequences.

Work tasks. The work itself—that is, the types of tasks that teams perform—is perhaps the most obvious and frequently studied contextual factor believed to moderate diversity dynamics. The generally accepted assumption is that the potential benefits of team diversity are greater for tasks that require creativity and innovation. For routine tasks, or when speed is the goal, diversity may interfere with performance (e.g., see Jackson, 1992; Priem, 1990; West & Schwenk, 1996; Williams & O'Reilly, 1998). The results of several early laboratory experiments supported this proposition, but clear evidence is not yet available from field studies. In fact, an alternative line of reasoning suggests that diversity is more likely to be detrimental for complex tasks because diversity makes the necessary coordination among team members more difficult (e.g., see Boone et al., 2004; Carpenter, 2002).

In the meta-analysis discussed above, Joshi and Roh (2009) found that relations-oriented diversity (gender, age, and ethnicity) had the most negative effects in moderately interdependent teams. Moderately interdependent tasks may impose constraints that interfere with the elaborative potential of diversity, but they may not be so demanding that team members are required to overcome categorization-based processes and collaborate with each other. Although the effect sizes were smaller, the meta-analysis also revealed a positive relationship between relations-oriented diversity and team performance for tasks requiring low levels of interdependence. Tasks that require low interdependence can be effectively performed with little communication and information exchange; the reduced interpersonal contact that is required may mean that team members are less frustrated by their dissimilarities and can more easily recognize the contributions that other team members make in achieving team goals (Chung & Jackson, 2009; Pelled et al., 1999).

Given these results, it appears that managing team diversity effectively may require organizations to take into account the degree of interdependence required to complete team tasks. Teams performing more complex and interdependent tasks may benefit more from team training or team coaching that facilitates group decision making and conflict resolution. A tailored team-focused approach to designing and delivering diversity initiatives may enhance the relevance and effectiveness of these practices within teams.

Virtual teams. During the past decade, many organizations have turned to geographically dispersed teams that collaborate electronically to cut costs, increase efficiency, and improve customer responsiveness (Apgar, 1998). Given the growing prevalence of virtual and geographically dispersed teams, the role of this contextual factor is of considerable interest.

On the basis of the premise that status and social influence are more likely to pervade face-to-face interactions than computer-mediated settings (which are considered to be more depersonalized), scholars have contrasted face-to-face groups with computer-mediated groups to examine whether the nature of participation varies in these two settings. In general, such studies have found that computer-mediated communication reduces social inhibitions and equalizes team member participation (Sproull & Keisler, 1986). Nevertheless, other research shows that the medium of communication does not alter basic social influence processes. As in face-to-face teams, status dynamics and social influence effects occur in computer-mediated groups (see Martins, Gilson, & Maynard, 2004). Weisband, Schneider, and Connolly (1995) concluded that "even in the relatively impoverished social context of anonymous computer interaction, when high-status members were aware that a low-status member was in their group, the former made assumptions about the (latter's) identity" (p. 1146). Findings such as these suggest that diversity dynamics in virtual teams may be similar to those in face-to-face teams, but much more research is needed before firm conclusions can be drawn about the role of this contextual factor.

Temporal context. Several studies indicate that the effects of work team diversity are moderated by temporal factors. We have already mentioned the findings of Harrison et al. (2002) concerning the shifting importance of readily detected and underlying (deep-level) attributes. Likewise, Pelled et al. (1999) found that the negative effects of readily detected (ethnicity, functional background, and organizational tenure) diversity were weaker in longer-tenured teams. A study of top management teams also found that the effects of demographic diversity were weaker for teams that had spent more time working together (Carpenter, 2002). More recently, in a study of turnover among adult restaurant employees, demographic misfit was found to be more predictive of turnover during the initial weeks of employment than later (Sacco & Schmitt, 2005). Other studies have failed to replicate these effects, however (e.g., Schippers et al., 2003; Watson et al., 1998), suggesting that the role of time as a moderator of diversity's consequences in work teams requires further research (see also Mohammed, Hamilton, & Lim, 2009).

Additional longitudinal research is clearly needed to trace the changing dynamics of diversity in work teams, but the available findings have some potential implications for employers. The evidence

suggests that readily detected diversity poses particular risks for work teams at early stages of their development. Work teams may eventually work through any problems they initially encounter on their own without outside assistance, and the process of doing so may be both natural and useful to teams. For companies that rely heavily on short-lived or temporary work teams, however, it may prove useful to speed up this process. Diversity awareness training aimed at educating employees about what to expect when working in diverse teams may prove useful for this purpose (Homan, van Knippenberg, Van Kleef, & De Dreu, 2007).

Organizational demography. Two objective characteristics of an organization's demographic composition can influence interactions in diverse teams—the overall heterogeneity of the organization (representation of demographic groups in the organization) and the level of structural integration (the representation of minority groups at higher levels in the organization; see Cox, 1991; Joshi, 2006). In structurally segregated organizations, the balance of power and status is skewed to the advantage of the dominant demographic group; such status and power differentials can undermine intergroup harmony and cooperation in work teams (Cox, 1993). The degree to which an organization is structurally segregated can be a powerful influence on social category–based identification and conflict among demographic groups (Cox, 1993; Ely, 1994; Wharton, 1992).

Ely's (1994, 1995) seminal work on the social construction of gender identity in organizations highlights the powerful influence that organizational demography can have. These studies and others (e.g., Ridgeway, 1997) show that in organizations where subordinate groups are underrepresented, negative stereotypes and biases toward these groups are more widely held. Joshi, Liao, and Jackson (2006) reported similar findings. They found that ethnicity-based and gender-based pay differentials were influenced by the combined effects of the demographic composition of one's work team and the demographic composition of managers in one's business unit. Commensurate with Ely's research, Joshi and colleagues found smaller pay gaps and improved performance for women in sales units with larger proportions of female managers.

Research that examines how organizational demography shapes the dynamics that unfold within diverse teams is likely to flourish in the future, as scholars conquer hierarchical linear modeling and other statistical techniques for testing multilevel effects. Recent theoretical advances will likely stimulate new work, also. For example, Joshi (2006) developed a conceptual framework that outlined the effects of organizational demography on the relationship between team diversity and both internal and external team relationships. The model draws on embedded intergroup relations theory and social identity theory to understand the combined effects of team diversity and organizational demography. By recognizing the fact that work teams are embedded in both organizations and larger societal systems, Joshi's framework draws attention to the interconnectedness of diversity dynamics across multiple levels of analysis. As scholars begin to examine diversity dynamics at multiple levels of analysis simultaneously, they are likely to also develop new multidisciplinary theoretical models.

Organizational culture. *Organizational culture* refers to the shared values, beliefs, expectations, and norms prevalent in an organization and manifests itself in organizational rituals, practices, and behavior. Two aspects of organizational culture that can shape employee behaviors and employment outcomes in diverse work settings are culture strength and culture content. *Organizational culture strength* refers to the extent to which organizational norms and values are explicit and enforced. Organizations with strong cultures are characterized by uniform expectations and responses. In organizations with weak cultures, there is less agreement about appropriate behaviors and expectations. To the extent that diversity management practices are supported by a strong organizational culture, they are more likely to be implemented successfully in organizations (Cox, 1993).

Organizational culture content refers to the specific norms, values, and beliefs that are prevalent (Cox, 1993). Chatman and Spataro (2005) argued that work team processes are shaped by the extent

to which an organization's culture emphasizes independence versus interdependence. In organizations that emphasize independence, team diversity may be negatively associated with cooperation. In more collectivistic settings, however, team members are more likely to pick up cues that emphasize cooperation in the face of demographic dissimilarity. Among groups of MBA students performing a business simulation, Chatman, Polzer, Barsade, and Neale (1998) found that the positive effects of demographic diversity are more likely to emerge in settings that emphasize a collectivistic orientation rather than in settings that emphasize individualism and distinctiveness.

Ely and Thomas (2001) argued that diversity is more likely to lead to positive outcomes when the organizational culture emphasizes integration and learning. Empirical studies that examined the effects of dissimilarity (relational demography) in organizations with differing cultures seem to support the general argument that organizations with cultures that reflect a belief that diversity is a valuable resource are more likely to realize the potential benefits of team diversity (Dass & Parker, 1999; Ely, 2004; Ely & Thomas, 2001; Gilbert & Ivancevich, 2000). On the other hand, organizational cultures that endorse a so-called color-blind approach may reinforce majority dominance and result in disengagement by minority employees (Plaut, Thomas, and Goren, 2009).

What is not yet well understood is how appropriate cultures become established in organizations. Generally, responsibility for setting an organization's cultural tone is assumed to rest with top management (see Wasserman, Gallegos, & Ferdman, 2008). Unfortunately, almost no empirical research is available to assure top executives that they will succeed in leading their diverse organizations if they follow the various prescriptions offered.

Diversity climate. The concept of organizational climate is closely related to the concept of organizational culture. *Diversity climate* refers to employees' perceptions of the degree to which all members of the organization are integrated into the social life of the organization and the use of fair human resource management practices (Mor Barak, Cherin, & Berkman, 1998). Diversity climate perceptions have been shown to predict behavioral outcomes such as attendance (Avery, McKay, Wilson, & Tonidandel, 2007) and turnover (McKay et al., 2007).

Limited research on the topic of diversity climate shows that perceptions of diversity climate often differ among employees of different demographic backgrounds, with ethnic minorities and women perceiving less positive diversity climates in their employment settings (Kossek & Zonia, 1993; Mor Barak et al., 1998). Research also shows that clusters of employees with similar perceptions of diversity climate share other attitudes, such as organizational commitment or job satisfaction (Nishii & Raver, 2003).

To date, research on diversity climate has focused on the consequences associated with the climate perceptions of individual employees; it says little about the effects of diversity climate on work teams. Nevertheless, as for organizational culture, the empirical evidence suggests that employers may increase the beneficial consequences of work team diversity by creating positive diversity climate perceptions through the use of fair human resource management practices.

Despite their best efforts, however, employers may not be in complete control of their employees' diversity climate perceptions (Pugh, Dietz, Brief, & Wiley, 2008). The racial composition of the community where the organization is located may also shape the formation of diversity climate perceptions. In a study of 142 retail banking facilities in the United States, Pugh et al. (2008) found that the racial composition of the communities in which organizations were located moderated the relationship between the racial composition of organizations and employees' perceptions of diversity climate. In communities with few racial minorities, the degree of diversity in work organizations was correlated with positive perceptions of diversity climate. As representation of racial minorities in the external community increased, the ethnic composition of organizations tended to lose its value as a signal of organizations' diversity climates. Results such as these indicate that the effect of diversity in organizations is influenced by the broad social and psychological conditions of the workplace (see also Homan, van Knippenberger, Van Kleef, and De Dreu, 2007). Thus, designing interventions to improve

organizational cultures and climates is likely to be a challenge that may require organizations to tailor their interventions to reflect the conditions in the communities in which they are embedded.

Understanding Leadership in Diverse Teams

Surprisingly, little is known about the question of whether team diversity creates special challenges for team leaders. According to the social identity perspective, mismatches (dissimilarity) between leaders and team members set the stage for in-group/out-group dynamics. Kirkman and colleagues argued that mismatches between the demographic attributes of leaders and their team members would be associated with lower levels of trust among team members and stronger member biases toward their leaders. Consistent with this logic, a study of 111 work teams in four organizations found a positive relationship between degree of racial fit (leader's racial similarity to team members) and team effectiveness as judged by the leader. The results also revealed that racial fit was associated with increased team empowerment (Kirkman et al., 2004).

The question of whether leader–team similarity influences team performance is of some interest, but perhaps it will be more useful to examine the leader behaviors or styles that are most effective for diverse teams. Attempting to match leaders to team members is fraught with ethical and legal difficulties, whereas selecting and training leaders based on their leadership competencies is both feasible and desirable. A company that we studied (see Jackson & Joshi, 2004; Joshi, Liao, & Jackson, 2006), for example, would never use racial fit to assign leaders to sales teams, but it was very willing to train all sales team leaders to improve their leadership competencies and/or alter their leadership styles.

A study of 136 primary care teams (Somech, 2006) suggested the potential value of additional research on the role of leadership style in diverse work teams. Somech (2006) found that functionally diverse teams with participative leaders engaged in more team reflection, which in turn was associated with team innovation; directive leadership promoted team reflection in teams with less functionally diversity.

Leadership behaviors may also influence diverse teams through motivational channels. Motivational leaders build linkages between team members' self-concepts and the team's work, thereby enhancing identification with the team (Ellemers et al., 2004; Turner & Haslam, 2001). By emphasizing the team's mission, shared values, and ideology, motivational leaders strive to link the interests of individuals with the interests of the team (Kark & Shamir, 2002). Research on so-called transformational leaders converges with the social identity perspective to suggest that a transformational leadership style may be especially effective for diverse work teams. A transformational leadership style includes acting as a role model and providing motivational inspiration and intellectual stimulation. Through their behaviors, transformational leaders align team goals with members' goals and values and build the team's sense of optimism and efficacy (Avolio & Bass, 2004; Bass & Riggio, 2006). In a longitudinal study of 62 R&D teams of a German pharmaceutical company, Kearney and Gebert (2009) found that the positive relationship between team diversity (on nationality and education) and team performance was stronger for teams with transformational leaders, compared to teams whose leaders were not perceived to be transformational. Apparently, transformational leaders were more effective in facilitating the exchange and use of task-related information, which contributed to the teams' performance.

Although it seems likely that effective leadership styles do not differ dramatically for teams that are relatively homogeneous or diverse, it is possible that effective leadership has greater importance for more diverse work teams. As the theories summarized earlier in this chapter suggest, diverse work teams hold the potential for being either very effective or very troubled. Effective leadership may be especially helpful in ensuring that such teams achieve their potential for excellent performance and avoid the interpersonal problems that may result in increased turnover rates (cf. Gibson & Vermeulen, 2003).

Understanding International Diversity

A 2005 survey of large global firms found that all of the respondents rated global diversity as an important or very important issue (Dunavant & Heiss,

2005). Yet, as Table 20.1 reveals, very few field studies of internationally diverse work teams have been published in the English-language journals we surveyed.

One explanation for the dearth of research on diversity in global work teams is that little specific theoretical attention has been given to these issues. The few studies of international teams that we located drew upon the same theoretical literatures as did studies focused on other types of diversity (e.g., see Earley & Mosakowski, 2000; Li & Hambrick, 2005; Jiang et al., 2008; Polzer et al., 2006). Another possible explanation for the dearth of research is the difficulty of conducting the studies. This is suggested by the fact that most studies of internationally diverse teams have been conducted using student samples rather than natural work teams (see Li & Hambrick, 2005, a study of joint venture teams, for an exception).

We also found few studies designed specifically to examine whether or how national cultures influence the functioning or performance of teams that are culturally homogeneous but otherwise diverse. Yet cultural values are associated with a wide variety of work-related attitudes and behaviors, and it is reasonable to expect them to affect employees' responses to team diversity (Jackson & Joshi, 2001; Triandis, 1992, 1994; Triandis, Kurowski, & Gelfand, 1994).

An example of how cultures contextualize team diversity dynamics is provided by Van der Vegt, van de Vliert, and Huang (2005). They argued that since demographic diversity is associated with status differences, the effects of demographic diversity on firm-level innovative climates would differ in high versus low power-distance cultures. Supporting these propositions, the results indicated that tenure and functional (but not age or tenure) diversity were positively associated with innovative climates in low power-distance cultures, but they were negatively associated with innovative climates in high power-distance cultures. The findings suggest that value and attitudes about equality (low power distance) and inequality (high power distance) influence the consequences of work team diversity.

In an effort to address the lack of research on global diversity, Nishii and Özbilgin (2007b) developed an integrative framework for conceptualizing global diversity that is likely to stimulate new work on this important topic. Briefly, their framework identifies characteristics of organizational policy makers and organizational culture that are likely to influence organizational approaches to global diversity management and subsequent diversity-related organizational outcomes. Nishii and Özbilgin also served as guest editors of a special journal issue devoted to this topic (Nishii & Ozbilgin, 2007a), which was an important step toward developing an international community of interested scholars. Given the growing internationalization of diversity research and the importance of this topic in large organizations, we expect scholarship will soon make progress toward understanding work team diversity in the global context.

Network Diversity

Employees who work in medium to large organizations must usually rely on others for the resources and support they need to function effectively (Hackman, 1999). As they cross formal boundaries, they share and obtain tacit knowledge as well as tangible resources (Anand, Glick, & Manz, 2002; Tsai, 2002; Tsai & Ghoshal, 1998). Through these and other activities, employees become embedded in organizational networks.

Just as network ties within a team tend to reflect the similarity bias, networks that form among team leaders and department managers are likely to be homogeneous rather than diverse (McPherson et al., 2001). Demographic similarity among team leaders or members of management may explain workflow networks and involvement in decision making (Bunderson, 2003). If demographic similarity of team leaders facilitates interteam cooperation, the teams working under similar leaders may achieve higher performance (e.g., see Joshi et al., 2006). Psychological similarity is important, too (e.g., Klein et al., 2004).

Going forward, it seems likely that studies of workplace diversity will increasingly emphasize the informal social structures that hold organizations together. When such networks are leveraged by teams or departments to gain access to knowledge and resources or to improve coordination with other units, they are likely to enhance both team

and organizational effectiveness. The challenge for organizations, then, is to facilitate the development of cohesiveness within work teams while also encouraging employees to build relationships beyond team boundaries. Research that sheds light on the combined effects of demographic and psychological network composition may provide insights into how to better manage the wide-ranging organizational networks that serve to connect the many individuals and work teams found within organizations.

Multilevel Perspectives

As a whole, the empirical research on workplace diversity includes work conducted at many levels of analysis, including individuals, dyads, small groups and teams, networks, business units, and organizations. This chapter focused on findings from studies of work teams. Within the literature on work team diversity, as is true more generally in research conducted on diversity, it is apparent that scholars often assume that theoretical constructs are portable across different levels of analysis, despite cogent warnings about the danger of such logic (Klein, Dansereau, & Hall, 1994; Rousseau, 1985, 2000). Paradoxically, although they often borrow theoretical arguments developed for understanding phenomena at other levels of analysis, studies of work team diversity have usually ignored multilevel complexities when developing their hypotheses and analyzing their results.

A few recent studies provide examples of the value of applying a multilevel perspective when studying work team diversity. In a study of sales teams, Jackson and Joshi (2004) modeled diversity effects at three levels of analysis: individual sales employees, sales teams, and sales districts (business units). Looking at performance as the outcome, their results revealed significant interactions between individual- and team-level predictors as well as additional effects at the district level. In an investigation of pay equity at this firm, Joshi, Liao, and Jackson (2006) found that pay equity was unrelated to team-level diversity but was significantly related to district-level diversity. In both studies, differences in effects at the team and district levels were unexpected, because the available theoretical perspectives provided no rationale to suggest different effects at different levels of analysis.

Looking ahead, increased use of multilevel analytic techniques may prove useful as diversity researchers strive to understand the important role of the contextual conditions within which diverse work teams are embedded. Likewise, research that addresses international diversity will almost certainly need to grapple explicitly with multilevel issues. When conducting research in organizational settings (vs. classrooms and laboratories), issues of context and the multilevel structures of organizations are ever present. Thus, often it is relatively easy in field research to incorporate such features of organizations. By doing so in future research on work team diversity, scholars may simultaneously improve their ability to speak to the concerns of managers and enrich their understanding of diversity dynamics.

Evaluating Diversity Initiatives

On the basis of a comprehensive study of diversity management practices, Kalev et al. (2006) sought to determine whether the use of such practices improves organizational outcomes such as diversity among top executives or firm performance. On the basis of data from 708 private sector establishments, the authors concluded that diversity practices aimed at reducing managerial bias (e.g., diversity training) were the least effective in increasing the proportion of white women and black men and women. Practices aimed at reducing social isolation (e.g., mentoring) were modestly effective. Practices that aimed at increasing accountability in meeting diversity goals were the most effective for increasing firm diversity. They concluded, "We know a lot about the disease of workplace inequality but not much about the cure."

Although managers undoubtedly evaluate—at least subjectively—the effectiveness of the diversity practices they adopt, very few rigorous evaluations of interventions intended to improve the functioning of diverse teams or business units have been published. There has been substantially more research effort devoted to assessing the effectiveness of practices aimed at reducing unfair employment bias and increasing the representation of various minority groups (for a review, see Kulik & Roberson, 2008b).

The possibility that diversity initiatives may be of little value is troublesome, for they have become part of the corporate landscape in recent years. Diversity training, for example, is now used in most American organizations (Esen, 2005) and is migrating to other continents (e.g., see Süß & Kleiner, 2008). Diversity training has been introduced by employers for a variety of reasons, which include communicating organizational values, educating employees about other diversity management initiatives that are being introduced by the organization (e.g., changes in performance evaluation criteria), improving employee competencies that are believed to be necessary to establish a positive diversity climate, and addressing specific problems—like differential performance, pay, promotion, or turnover among employees from various demographic subgroups.

Diversity education. A few studies have shown that diversity training can achieve basic educational goals. Informing employees of the advantages of a diverse workforce (Adler, 1986) and increasing employee acceptance of other diversity initiatives are two common educational goals for employers (Ellis & Sonnenfeld, 1994; Hanover & Cellar, 1998). Diversity education programs may set the stage for subsequent behavioral change, but they do not explicitly attempt to produce behavioral change.

Diversity awareness training. Two training approaches aimed at achieving behavioral change are awareness training and skills training. In awareness training programs, the goal is to change attitudes. The assumption of such training is that awareness is a necessary first step toward reducing the negative behavioral consequences of biases and stereotypes. Often the approach involves activities designed to reveal employees' own (and perhaps others') biases and stereotypes and also to help employees understand the possible consequences of these. Based on a review of 20 studies conducted in organizational settings, Kulik and Roberson (2008a) concluded that diversity awareness training results in sustained improvements in overall attitudes toward diversity. However, attitudes toward specific demographic groups (e.g., defined by ethnicity, gender, age) appear to be more resistant to change and may even be at risk of a backlash effect (e.g., see Alderfer, 1992).

Diversity skills training. With diversity skills training, the focus is directly on changing behaviors that are needed to work effectively with dissimilar others. Among the skills identified as relevant for working in diverse teams are communication, conflict management, and behaving in ways that reflect sensitivity to cultural differences, as well as other skills that are generally useful for teamwork.

On the basis of their review of 15 studies of diversity skill training effectiveness, Kulik and Roberson (2008b) concluded that there is little evidence to show that diversity skills training produces observable behavioral changes. Studies that relied on trainees' self-reports generally found that employees reported self-improvement after receiving diversity skills training. However, when more objective measures of skills were used to assess training effectiveness, the results were mixed (Byington, Fischer, Walker, & Freedman, 1997; Roberson, Kulik, & Pepper, 2009; Sanchez & Medkik, 2004; Wade & Bernstein, 1991; Williams, 2005). Unfortunately, none of these studies was designed to assess whether diversity skills training improved teamwork processes (e.g., reduced conflict) or outcomes (e.g., improved performance).

There is a clear need for additional research aimed at evaluating diversity initiatives that might improve the effectiveness of diverse work teams. First, rigorous needs analysis research is needed to improve our understanding of the specific attitudes and behaviors (including those of leaders) that are relevant to the effectiveness of diverse work teams. Second, evaluation studies are needed to determine the types of interventions that can be used to elicit and support those attitudes and behaviors.

Also needed is research that focuses on teams as the focal unit for training to complement the usual practice of focusing on training for individuals (cf. Jackson, Chuang, Harden, & Jiang, 2006). Training designed and conducted with intact teams may prove more useful than training designed for and delivered to individual employees. Team-based training may be especially useful when it is designed to address the specific types of diversity present in the team, the specific types of tasks for which the team is responsible, and the specific form of leadership under which the team operates.

Conclusion

Despite the equivocal findings described in this chapter, we end this review on an optimistic note. Recent theoretical and methodological advancements in the field have opened up many new opportunities for diversity researchers, many of which are being explored already. As we write this chapter, we know that colleagues are forging new theoretical perspectives, crossing new frontiers in the development of diversity metrics, and employing multilevel methodologies to shed new light on the complexity of diversity dynamics at work. We know, too, that employers continue to invest in new diversity initiatives as they strive to create conditions that enable an increasingly diverse population of employees to effectively leverage their differences and achieve superior team results. Perhaps, a decade from now, a review such as this one will be able to provide answers to many of the questions we have raised.

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