The Impact of Visible Diversity on Organizational Effectiveness: Disclosing the Contents in Pandora's Black Box

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We offer a theoretical model to clarify the impact that visible diversity has on firm effectiveness. In particular, we outline the key determinants of diversity and synthesize previous literature that has explored the impact visible diversity has on organizational processes—conflict types—and outcomes. The main focus of our model, however, is concerned with the curvilinearity of the relationship between visible diversity and firm outcomes. We also explore contextual factors, which are relevant when modeling the diversity-organizational effectiveness relationship. In sum, we offer a framework for understanding what conditions may be necessary to obtain positive organizational effects from visible diversity. Implications for future research and practice are also offered.

Increasing diversity (visible diversity for the purpose of this manuscript) in the workforce poses challenging human resource (HR) and organizational issues. Visible diversity refers to variance in visible or surface characteristics such as race, gender, and age (Cox, 1994; Harrison, Price, & Bell, 1998; Milliken & Martins, 1996). Race is categorized into African American, White, Asian American, Native American, and Hispanic while gender is categorized into men and women. Changes in workforce demographics and social and legal pressures to improve employment and career opportunities for women and racial minorities have spurred considerable organizational activity designed to both respond to these external developments and to strengthen organizational capabilities in managing a more diverse workforce. Not surprisingly, there has also been an enormous growth in research on diversity in the management literature, matching developments in organizational practices. Much of this work has been prescriptive in nature, focusing on efforts to convince managers to value diversity. Two things missing in the literature to date, however, are a clear analytical foundation and a framework for organizing the evidence on how diversity per se, or organizational processes set in motion by increased diversity and efforts to manage it, relate to organizational effectiveness. We review literature relevant to developing a deeper understanding of how visible diversity (i.e., race, gender, age) affects organizational effectiveness and suggest a framework for organizing our understanding with particular focus on the group level of analysis.

An Organizing Framework

Figure 1 outlines the framework we are using to organize our analysis. It suggests that there is little reason to expect only a natural, direct, and uniform relationship between visible diversity and organizational effectiveness. Instead, the effects of diversity are expected to be determined by (1) how diversity is achieved in organizations (e.g. how the organization responds to the various driving forces) and (2) by the organizational processes often ignored within the black box that diversity affects. These mediating processes or conflicts arise because of greater interactions among interdependent groups with divergent goals. For example, as organizations begin utilizing work teams, increased visible diversity will likely result in increased conflict among team members. As such, conflict is a mediator of the relationship between visible diversity and performance. Some of the moderating factors are specific contextual variables and organizational strategies which may bring out the effectiveness of diverse groups. For example, an organization's business strategy should be consistent with other aspects of the firm. Business strategy fosters or impedes the effectiveness of an organization's diverse workforce (Richard, 2000). In fact, one of the fundamental concerns of Strategic Human Resource Management (SHRM) involves the changing demographics of the workforce (Schuler & Walker, 1990). The increasing diversity of the workforce is requiring human resource (HR) managers to find new ways of understanding and managing employees. Thus, consistent with a growing body of other SHRM research, we expect that diversity must be studied as part of a broader set of interrelated organizational processes and variables. The net effects on organizational effectiveness, we believe, lie in the interactions among these variables.
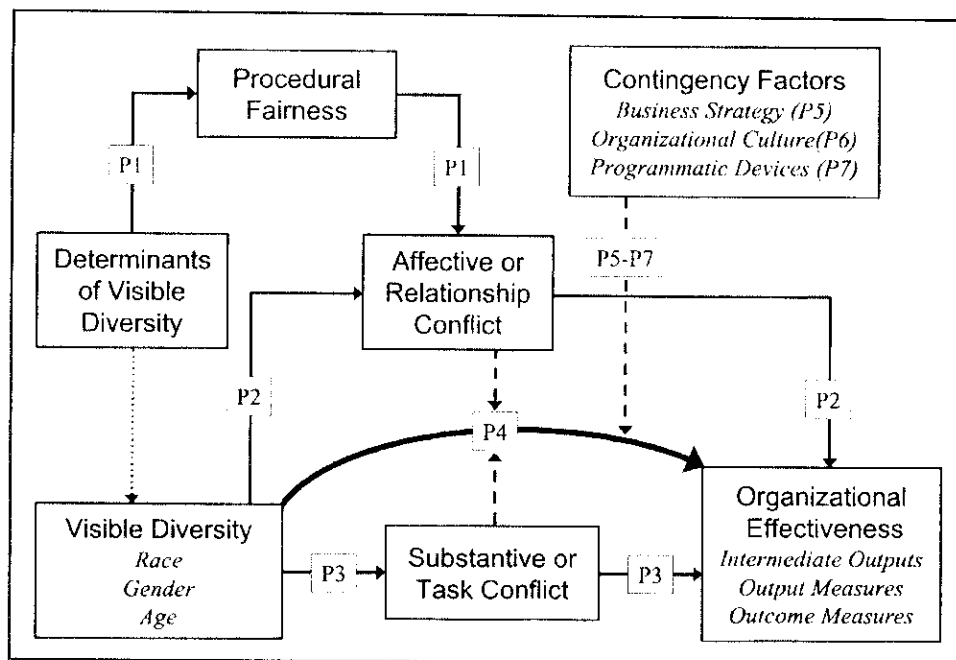

Figure 1. Model of visible diversity and organizational effectiveness.

KEY DETERMINANTS OF A DIVERSE WORKFORCE

There are many different bases for the increasing diversity in organizations. These determinants often influence the recruitment and selection process implemented by the organization. In addition, they can impact how an organization's employees perceive underrepresented groups based on race, gender, and age. Determinants of diversity may also be used as justifications for the implementation of organizational processes and decisions. In this section, we discuss some of the key determinants of a diverse workforce.

Labor market demographics. The Hudson Institute's Workforce 2020 projects that minorities will soon comprise the majority of new net entrants in the United States workforce (Judy & D'Amico, 1997). Another projection reflects a decrease in the percentage of white males in the labor force, from 43 percent in 1990 to 38% in 2005 (Friedman & DiTomaso, 1996). Most experts predict continued high levels of immigration in the United States throughout the rest of the century, particularly from Asians and Hispanics. As trends continue within the labor market, firms must recruit and select competent employees from a more diverse talent pool. This results in a more heterogeneous workforce.

Political/legal forces. Organizations are also motivated to address diversity-related issues in response to external pressures from the community (political forces) or from the government (legal forces). Title VII of the Civil Rights Act of 1964 outlaws discrimination on the basis of race, sex, age, and nationality, and attempts to foster a work environment that does not tolerate harassment. Blum, Field, and Goodman (1994) illustrate how organizations place more women in management partly because of institutional pressures (1) to appear more legitimate than other firms in the eyes of the public, (2) to comply with the intent of antidiscrimination regulations (e.g., Equal Employment Opportunity Commission), and (3) to improve their image and reputation to associations to which they are dependent for resources. Scholars have investigated the impact of legal forces on racial and gender composition. Konrad and Linnehan's (1995) findings reveal that HR diversity policies developed in response to EEO/AA legislation are strongly linked with more favorable employment status for women and racial minorities.

Organizational determinants. A number of studies have found that organizational variables substantially influence the opportunities afforded female employees and job candidates (Bielby & Baron, 1986). Older, more stable organizations are less willing to change the status quo (Kelly & Amburgey, 1991; Meyer & Rowan, 1991). For example, in their study of gender integration, Baron, Mittman, and Newman (1991) found that smaller organizations integrated faster and thus were more willing to hire or promote women in management. Another study by Blum, Field, and Goodman (1994) found that the percentage of women in management was substantially higher in the service industry compared to the manufacturing industry due to the faster growth in employment opportunities within the service industry. Pfeffer, Davis-Blake, and Julius (1995) found that affirmative action officers with higher status, as reflected by higher pay relative to other administrators in the same organization, were more likely to mobilize resources and have a higher proportion of women and minorities. These findings, in sum, illustrate the importance of organizational factors in increasing visible diversity.

Employee actions. Internal pressure in the form of employee complaints, collective actions (networks, participation, caucuses), and behaviors (e.g., turnover, absenteeism, lower productivity) can motivate employers to take initiatives towards a more diverse workforce. Minorities may be dissatisfied with a lack of career development and diversity initiatives and thus would be likely candidates to engage in efforts to improve their circumstances. For example, Eisenhardt and Bourgeouis (1988) found that political activities in organizations were organized around stable coalitions whose membership was based on demographic characteristics. Thus, minorities would appear as likely groups to engage in collective efforts to increase the distribution of rewards across interest groups. Network groups or caucus groups are associations of racial minority or women employees that exist in organizations to address concerns or needs of employees in the group (Friedman, Kane, & Cornfield, 1997; Scully & Segal, 1994). Network groups tend to engage in both self-help and organizational change. For example, Friedman and Carter (1993) found in their study of the black caucus at Xerox that these groups emerge to address their concerns and needs as well as to sustain the commitment to diversity over time.

Top management group commitment. The personal commitment of individual leaders can focus attention and resources on diversity issues. Dass and Parker (1996) emphasize how the cognition—belief that diversity matters—of the top decision-makers determines the extent to which diversity objectives are met. For example, Baron, et al. (1991) found that having a female as agency head of the entity increased the rate of gender integration. A more recent study by Pfeffer, et al. (1995) found that when the president of a university was a woman there was more gender integration, and when the president was a minority there was more racial and gender integration. They also found that having a female affirmative action (AA) officer increased the level of gender integration, while having a racial minority AA officer increased the proportion of racial minority administrators.

In addition, perceptions by top management that a competitive advantage can be achieved through diversity will lead to increases in the recruitment and hiring of underrepresented subgroups. In particular, Cox and Blake (1991) offer ways that cultural diversity can offer competitive advantage and many companies have taken efforts to increase their race, gender, and age heterogeneity to reap these benefits. Visible diversity may contribute to increased marketability, increased creativity, increased problem-solving ability, and more flexibility.

VISIBLE DIVERSITY AND ORGANIZATIONAL EFFECTIVENESS

Recent scholars note that different types of diversity have different effects, and results from one type should not be generalized to other types (Jehn, Chadwick, & Bushnell, 1998; Pelled, 1996). For example, Pelled (1996) argues that nonvisible attributes such as education and background have quite different effects on performance than visible attributes such as race, gender, and age. Following this line of reasoning, we focus exclusively on the research area that is most ambiguous in previous literature: visible diversity.

Diversity potentially or has been argued to provide a competitive advantage for organizations through increased creativity and problem-solving capabilities (Cox, 1994; Cox & Blake, 1991). In contrast, a number of studies have found diversity has negative effects on several organizational processes that can affect organizational performance. Heterogeneity in groups,

for example, has been associated with stereotyping, in-group/out-group effects, affective conflict, and turnover (e.g., Linville & Jones, 1980; O'Reilly, Snyder, & Boothe, 1993; Pelled, 1996; Tsui, Egan, & O'Reilly, 1992). In addition, some empirical research shows that in-group preference, in terms of demographics, exists in organizations (Allen & Wilder, 1975; Brewer, 1979; Tajfel, 1982). The next section reviews the literature on how diversity, in isolation, may lead to (1) negative organizational outcomes, and (2) positive organizational outcomes.

Negative Effects of Visible Diversity

Two theoretical frameworks are discussed for interpreting previous empirical findings concerning the negative outcomes: Social identity theory and the similarity/attraction paradigm.

Social identity theory. According to social identity theory, belonging to a group (e.g., racial) creates a psychological state that confers social identity or a collective representation of self-identity and behavior. The psychological processes associated with social identity generate distinct group behavior, such as solidarity within one's group, conformity to group norms, and discrimination against out-groups (Tajfel, 1982). For example, Williams and O'Reilly (1997) note in their review of diversity research that diversity in groups and organizations can result in the creation of in-groups/out-groups and other cognitive biases (e.g., Ely, 1994; Riordan & Shore, 1997; Smith, et al., 1994; Tsui, et al., 1992).

The social identity approach contributes to understanding the dynamics of conflict. Messick and Massie (1989) noted that the process of self-categorization often relies on social categories such as race, gender, and age. The "out-group" is typically seen as deficient (Loden & Rosener, 1991) triggering a process that results in increased stereotyping, polarization, and anxiety. In diverse groups, these effects have been shown to lead to negative consequences such as decreased satisfaction with the group, increased turnover, lowered levels of cohesiveness, reduced within group communication, decreased cooperation, and higher levels of conflict (e.g., Crocker & Major, 1989; Martin & Shanrahan, 1983; Moreland, 1985; Stephan & Stephan, 1985; Triandis, Kurowski, & Gelfand, 1993).

Similarity/attraction paradigm. Another theoretical foundation for diversity studies is the similarity/attraction paradigm (e.g., Berscheid & Walster, 1978; Byrne, 1971). Similarity represents an important basis of interpersonal attraction and consequently of social integration and cohesion (Baron & Pfeffer, 1994). In his original paper on organizational demography, Pfeffer (1983) pointed out that it was the distribution of demographic differences in groups and organizations that affected process and performance. Pfeffer (1983, 1985) called attention to the fact that the demographic composition of groups across variables such as age, tenure, sex, race, socio-economic background, and religion results in variations in communication, cohesion, and integration. The findings from previous research on similarity/attraction (Pfeffer & O'Reilly, 1987; Tsui & O'Reilly, 1989; Zenger & Lawrence, 1989) support the theory's basic premise that similarity on demographic variables such as race and gender increases interpersonal attraction and liking.

Social identity theory and the similarity/attraction paradigm both predict that increased diversity results in negative outcomes. In contrast to most social identity theory work which focuses on mainly group processes and outcomes, Pfeffer's (1983) similarity/attraction paradigm model draws from more of a sociological perspective and focuses on organizational level constructs such as communication networks, cohesiveness, and patterns of employee flow. Notwithstanding, the empirical findings from numerous studies show that dissimilarity often results in group process and performance loss, including less positive attitudes, less frequent communication, and a higher likelihood of turnover from group members (O'Reilly, Caldwell, & Barnett, 1989; Riordan & Shore, 1997; Zenger & Lawrence, 1989). Williams and O'Reilly (1997) note that research on group process has most frequently investigated processes in terms of three primary dimensions: social integration, communication, and conflict. These three constructs are the most widely mentioned processes that are proposed to intervene between diversity and performance. Since these constructs are strongly associated with each other, consistent with Pelled (1996) and most social identity theory work, we incorporate only conflict into our conceptualization.

Affective conflict refers to interpersonal clashes characterized by anger, distrust, frustration, and other negative affect (Pelled, 1996) which are likely to occur if subgroups are brought into the organization through mechanisms they or others perceive to be unfair. Pelled (1996) posits that race, gender, and age, due to their high visibility, foster categorization and intergroup bias resulting in increased levels of affective conflict. Findings have shown that affective conflict negatively relates to productivity and satisfaction (Gladstein, 1984; Wall & Nolan, 1986). For example, Evan's (1965) findings revealed that when relationship or affective conflict was present, group productivity plummeted. The process loss (extent to which group performance is inhibited by misunderstandings, miscommunication, and dislike among group members due to gender heterogeneity) from increased affective conflict leads to decreased organizational effectiveness. In addition, research suggests that affective conflict results in limited shared information and decreased interaction among organizational members (Amason & Sapienza, 1997).

Similarity/attraction and social categorization theories also predict that racial diversity will have negative effects on group process by decreasing interpersonal attraction and increasing cognitive biasing (Linville & Jones, 1980), leading to less open communication and more conflict. Using this logic, Pelled (1993) found support for this contention in a study showing that racial diversity was associated with higher levels of affective conflict. In addition, Tsui, Egan, et al. (1992) found that individuals who were different from others in their work units in racial background tended to be less psychologically committed to their organizations, less inclined to stay with the organization, and more likely to be absent. In addition, Riordan and Shore (1997) investigating the impact of racial diversity found that Hispanics and African Americans showed lower levels of commitment when they were in mostly white groups. In summary, social identity theory and the similarity/attraction paradigm suggest that both racial and gender diversity can have negative effects on group processes.

Concerning age, Zenger and Lawrence (1989) found that age diversity in group projects was negatively related to frequency of technical communication within the group. In addition, Jehn, et al. (1998) concluded that age increased affective or relationship conflict. Concerning group performance, Zajac, Golden, and Shortell (1991) supported the notion that age diversity

negatively relates to firm outcomes. Also, several studies showed a negative relationship between age diversity and firm turnover or absenteeism, which has negative implications for firm performance (Jackson, et al., 1991; O'Reilly, et al., 1989; Wagner, Pfeffer, & O'Reilly, 1984).

Thomas and Ely (1996) state how several business leaders found out that increasing demographic variation within their firms did not in itself increase organizational effectiveness. Williams and O'Reilly (1997) conclude that the evidence suggests that diversity is likely to have negative rather than positive effects on both process and outcomes. Therefore, we assert the following:

> **Proposition 1:** *Holding all other factors constant, visible diversity in groups is associated with affective conflict. Affective conflict mediates the relationship between visible diversity and effectiveness (Figure 1).*

Positive Consequences of Visible Diversity

Proponents of diversity maintain that different opinions provided by culturally diverse groups make for better-quality decisions (Cox, 1994; McLeod, Lobel, & Cox, 1996; Ziller, Behringer, & Goodchilds 1962). Nemeth (1992) maintains that minority viewpoints foster quality of thought, performance, and decision-making. McLeod and Lobel's (1992) findings reveal that bicultural individuals possess flexibility in their thinking and more ability to use divergent thinking. In one study (Hoffman & Maier, 1961), management trainees were put into heterogeneous or homogeneous (i.e., in values and opinions) trios. When asked to generate alternative solutions to a problem, heterogeneous groups outperformed homogeneous groups. Teams composed of members with diverse backgrounds and characteristics produce a wider variety of ideas, alternatives, and solutions than teams composed of people with similar demographic characteristics (Bantel & Jackson, 1989; Jackson, 1992). These effects result from many types of diversity including age (Zajac, et al., 1991), sex (Wood, 1987), and ethnicity (Jackson, May, & Whitney, 1995).

When working on complex, nonroutine problems, groups composed of individuals with diverse types of skills, knowledge, abilities, and perspectives tend to experience greater task conflict. Task conflict (i.e., substantive conflict) refers to "disagreements among members about the content of the tasks being performed, including differences in viewpoints, ideas, and opinions (Jehn, 1995, p. 254). Task or substantive conflict contributes to a more complete analyses of the issues, and consequently, improved decision-making and performance (Jehn, 1995; Pelled, 1996).

A few laboratory studies provide support for the positive benefits of racial diversity. Cox, Lobel, and McLeod (1991) reported that individuals from collectivist cultural backgrounds (e.g., African-Americans, Hispanics) were more cooperative on a choice-dilemma task than were people from individualist cultural backgrounds (i.e., European-American). Watson, Kumar, & Michaelsen (1993) studied the interaction process and performance of culturally homogeneous and culturally diverse groups for 17 weeks. Initially, homogeneous groups scored higher on both process and performance effectiveness. Over time, both types of groups showed improvement on process and performance, and the between-group differences

converged. By week 17, the heterogeneous groups scored higher on two task measures. More recently, results from a controlled experimental brainstorming study (McLeod, et al., 1996) show that ideas produced by ethnically diverse groups were judged to be of higher quality than ideas produced by homogeneous groups. In addition, Hoffman and Maier (1961) found that gender diversity facilitated creativity. These studies in sum provide some evidence that visible diversity relates to substantive conflict.

Previous research shows that substantive or task conflict within teams improves decision quality, financial performance, and firm growth (Schweiger, Sandberg, & Rechner, 1986; Eisenhardt & Schoonhoven, 1990). In fact, Pelled (1996) provides a framework that proposes a direct relationship between substantive or task conflict and performance. Jehn (1997) found that groups that accept task but not affective conflict are most effective. Thus,

> ***Proposition 2:*** *Holding all other factors constant, visible diversity in groups is associated with substantive (i.e., task) conflict. Substantive conflict mediates the relationship between visible diversity and effectiveness.*

Curvilinearity

The above shows that two opposing literatures inform the study of heterogeneity on effectiveness. First, proposition 1, which proposes negative consequences of diversity, is guided by social identity theory and the similarity-attraction paradigm (Byrne, 1971; Tsui, et al., 1992). Second, proposition 2, which offers positive effects, is guided by the value-in-diversity position which views diversity as a human capital asset (Cox, 1994, Cox, et al., 1991; Maznevski, 1994; Richard, 2000; Watson, et al., 1993). Integrating these two perspectives lead us to posit an inverted U-shaped relationship between visible diversity and effectiveness. That is, we expect some optimal, moderate level of diversity where communication barriers and relationship or affective conflict have not fully surfaced and thus do not override the task-based or substantive conflict and creativity gains. Recent management research has recognized that relationships between variables are often non-monotonic and many organizational phenomena appear to be non-linearly related to constructs of interest (Earley & Mosakowski, 2000; Gulati, 1995; Janssen, 2001). In addition, researchers have suggested the importance of examining the density or proportion of members in a group or organization when studying the impact of cultural diversity (Cox & Nkomo, 1996; Davis, Cheng, & Strube, 1996; Williams & O'Reilly, 1997). Some argue that the organizational experience of minorities will become more positive as their density increases (Blau, 1977; Homans, 1950; Kanter, 1977). For example, South, Bonjean, Markham, and Corder (1983) found that the higher the proportional representation of females, the lower the solidarity among male workers and the greater the social support for males from female coworkers. Others posit that the experiences of minorities will become more negative as their density increases (Blalock, 1956, 1957; Brown & Fuguitt, 1972; Frisbe & Neidert, 1977; Giles, 1977; Wharton & Baron, 1987).

We argue that these mixed results signify an inverted U-shaped curvilinear relationship between visible diversity and organizational effectiveness. For instance, Greening and Johnson (1997) reported curvilinear relationships between functional diversity and tenure diversity,

and organizational responses. In addition, Carpenter and Fredrickson (2001) found that uncertainty moderated the curvilinear relationship between top management team diversity in terms of educational heterogeneity and strategic positioning. Due to the saliency of visible diversity, we posit that the relationship between diversity and organizational outcomes will be more pronounced with race, gender, and age. That is, an increase in visible diversity is beneficial for organizational effectiveness, but not beyond, a certain level consistent with the value-in-diversity hypothesis; after attainment of the optimum level of visible diversity, diversity impedes organizational effectiveness consistent with social identity predictions.

Levels of cultural diversity can be determined by calculating the percentage of women and racial minorities in the organization. Blau's (1977) heterogeneity index assesses the level of diversity in organizations with a theoretical range from 0 to 1 where higher values represent greater diversity. This index of heterogeneity

$$(1 - \Sigma pi^2)$$

assesses overall organizational diversity where p is the proportion of members in a category and i is the number of different categories represented in the organization. For age diversity, the coefficient of variation (standard deviation divided by mean) is a reliable and valid operationalization (Bantel & Jackson, 1992). Our conceptualization is based on the 13 model of group dynamics—a nonlinear proposition—which contends that diverse groups that contain equal numbers of each category will be the least harmonious (Davis, et al., 1996). We present the following curvilinearity argument below.

At low levels of diversity (e.g. from 0 to .25 on the heterogeneity index), affective or emotional conflict does not hamper organizational performance; however, the creativity obtained from a heterogeneous group and the information and decision-making theory assertions begin to positively impact firm performance as visible diversity increases.

At moderate levels of visible diversity (e.g., up into a theoretical value of .5 on the heterogeneity index), information and decision-making theories predominate, and cognitive variety, different information sources, and creative decision-making ultimately increase substantive or task conflict thereby enhancing firm performance (Schweiger, Sandberg, & Ragan, 1986; Schweiger, et al., 1989; Amason, 1996).

At high levels of diversity (e.g., from .51 to 1 on the heterogeneity index especially where there are equal numbers of each category or a value of 1 on the index of heterogeneity), the social identity theory and/or similarity attraction processes begin to override the potential creativity gains, and social disintegration begins. Affective conflict will be highest in equally balanced diverse groups because neither group is dominant and both groups are struggling for control (Coleman, et al., 1966; Longshore, 1984; Longshore & Prager, 1985). For example, Davis, et al. (1996) found that small group dynamics were significantly affected by racial composition such that groups with equal numbers of black and white men experience a less favorable group atmosphere. Due to high levels of affective conflict, members start to communicate with each other less (Pelled, 1996; Tsui & O'Reilly, 1992; Zenger & Lawrence, 1989) and performance decreases. Also, while high levels of diversity do provide useful diverse information, the ability to process all the knowledge becomes increasingly difficult.

Taking previous work into consideration, we argue that although moderate levels of visible diversity may be beneficial in terms of varied skills and worldviews stemming from diversity, excessive diversity may trigger interpersonal conflict and communication breakdowns. In sum, the relationship between visible diversity and firm performance is weak and positive at low levels, strong and positive at moderate levels, and strong and negative at high levels. Although not a visible dimension of diversity, Hitt, Hoskisson, and Kim (1997) found a curvilinear relationship between international diversification and firm performance. We believe that visible diversity offers similar knowledge-based benefits as international diversification. While international diversification at the firm level relates to innovation at a broader level, visible diversity in groups is associated with creativity—where innovations originate (Hitt, et al., 1997; Hoffman & Maier, 1961; McLeod et. al., 1996).

These arguments suggest that the relationship between visible diversity and organizational effectiveness is nonlinear and are offered as a supplement to the linear relationships hypothesized above. Non-linearity would explain how the two mid-range theories—social identity theory and information and decision-making theory—complement each other and provide a comprehensive explanation of the relationship. Thus,

> *Proposition 3: The relationship between visible diversity in groups and effectiveness is curvilinear, with the slope positive at low and moderate levels of diversity but negative at high levels of diversity.*

In sum, we have identified conflict as the mediating variable responsible for the relationship between visible diversity and organizational effectiveness. We theorize that at low and moderate levels of diversity, task conflict is a powerful mediator. However, at high levels of diversity, affective conflict appears to be a key mediator.

EMPLOYEE REACTIONS AND PROCEDURAL FAIRNESS

It is likely that employees' reaction to diversity is contingent upon the organization's basis for the diversity initiatives with the goal of increasing workforce heterogeneity. Perceptions of procedural fairness should vary across the previously discussed determinants of diversity. Much of the success or failure of diversity initiatives can be attributed to whether employees believe the recruitment and selection processes to be fair. Research on procedural justice provides a lens for exploring attitudes and perceptions of fairness in a work-related setting.

The perceived fairness of the process—in this case the determinants—forms the basis of procedural justice. Procedural justice focuses on the perceived equity of the process used to make managerial decisions (Greenburg, 1990; Lind & Tyler, 1988) concerning increasing diversity. If the process appears unfair, minorities suffer negative self-perceptions of competence (Heilman, Kaplow, Amato, & Stathatos, 1993; Heilman, McCullough, & Gilbert, 1996). For example, Richard and Kirby (1997) found that African-American college students expressed more positive attitudes toward diversity selection when the justification for making such a decision was based upon Cox's (1991) marketing argument compared to no justification at all. Kirby and Richard (1996) found that white males experience more resentment towards diversity efforts when the processes were not perceived to be fair or no justification was given for the targeting of minorities. In addition, Richard and Kirby (1997) found firms that

utilized Cox's (1991) problem-solving argument as justification for diversity selection compared to other arguments or no justification had higher levels of job involvement and organizational commitment among employees.

Research in the organizational justice area has shown that procedural justice is an important determinant of attitudes and behavior (Lind & Tyler, 1988). Numerous studies have shown the relationship between procedural fairness and organizational outcomes such as trust in a decision-maker (Folger & Konovsky, 1989), commitment to a decision (Korsgaard, Schweiger, & Sapienza, 1995), cooperative behaviors (Moorman, 1991), and resentment toward diversity selection processes (Kirby & Richard, 1996). Firms that do not allow legal forces to serve as motivators for increasing racial and gender composition and take a proactive approach to increasing diversity should have employees with higher perceptions of procedural fairness. In other words, top management commitment, organizational determinants, and employee actions may all result in positive perceptions of fairness in organizations, while legal forces, such as affirmative action or litigation may result in negative perceptions of justice. This will ultimately lead to more positive attitudes, higher levels of job involvement, and higher levels of organizational commitment among all employees.

The relationship between procedural fairness and affective conflict derives from the above discussion. In particular, employees who perceive the process of increasing diversity to be unfair may become angry, have hostile interactions with other employees, and experience an increase in negative feelings toward the selected individual. Jehn (1995) defines the construct as relationship-focused conflict because it focuses on personal incompatibilities or disagreements. Alagna, Reddy, and Collins (1982) studied groups of all-male versus mixed-sex medical student groups and found that mixed-sex groups reported higher levels of conflict, interpersonal tension, and lower levels of friendliness. In addition, Jehn, Northcraft, and Neale (1999), found that visibly diverse groups were more likely to experience affective conflict than other diverse groups. In particular, they report that informational diversity was more likely to lead to task conflict while demographic diversity was more likely to lead to affective conflict. Research suggests that affective conflict weakens decision making effectiveness, limits the ability of employees to process new information, reduces responsiveness to ideas advocated by those who are different, decreases the willingness to tolerate opposition, and disrupts effective communication (Janssen, van de Vliert, & Veenstra, 1999). For example, Tolbert, Simons, Andrews, and Rhee (1995) found that as the proportion of women in a department rose, turnover among women also increased, confirming the prediction that increases in the relative size of a minority results in more intergroup conflict. We expect similar predictions from racial diversity.

Proposition 4: Procedural fairness mediates the relationship between determinants of visible diversity and affective conflict.

Up until now, we have been general with our usage of organizational effectiveness. Our model has greater implications for studying diversity at the dyad, team, and group levels of analysis because it is at these levels that social identity processes (i.e., affective conflict) and value-in-diversity processes (i.e., task conflict) can be measured and mediating relationships can be investigated. The next section still primarily focuses on the dyad, team, and group

levels as well although the proposed relationships can also be explored at the firm level of analysis.

THE ROLE OF KEY CONTINGENCY VARIABLES

Studies that have been conducted offer conflicting findings concerning cultural diversity's impact on organizations (Milliken & Martins, 1996; Williams & O'Reilly, 1998). The current literature on the effects of visible diversity can generally be classified into two categories: those that find positive effects and those that find negative effects. However, in order to advance the state of the field there is a need to integrate these categories into a strong theoretical framework. Unfortunately, no single theory explains why diversity seems to be both an asset and a liability (Jackson, et al., 1991). Therefore, we have offered a curvilinear model which integrates multiple theories to explain the impact of visible diversity on effectiveness. In addition, we argue that highly heterogeneous groups will be more effective than low or moderately heterogeneous groups in settings where contingency factors reduce affective conflict and/or facilitate substantive conflict. More specifically, we offer several contingency variables that combat the detrimental impact of high levels of diversity and instead, increase the benefits of high levels of diversity within an organization.

Contingency theories propose that the relationship between the independent variable and dependent variable changes with different levels of the contingent variable (Richard, 2000). In particular, the crux of contingency theory lies in the fact that there is no one best way to manage an organization (Lawrence & Lorsch, 1967). As such, contingency theory allows diversity to be examined in conjunction with other aspects of the group or organization.

Recent research suggests the importance of accounting for several additional intervening contextual variables when modeling the diversity-organizational effectiveness relationship (Chatman, Polzer, Barsade, & Neale, 1997; Richard, 1998; Williams & O'Reilly, 1997). In particular, "the understanding of diversity within organizations requires taking into account business strategies, organizational culture, and human resource management systems" (Jackson, 1999). As such, we explore the role that business strategy, organizational culture, and programmatic devices play in gaining a more thorough understanding of the impact of diversity on organizational effectiveness.

Innovative Business Strategy

In order for a firm to experience the positive effects that diversity offers, it must be in a position to exploit and benefit from the diversity (Barney & Wright, 1998). Business strategy is one way that organizations can position themselves to take advantage of a diverse workforce. Miles and Snow (1978) offer a strategic typology (prospectors, analyzers, defenders, reactors) which has been employed in recent studies considering contextual factors such as strategy, structure, and size (Delery & Doty, 1996; Doty, Glick, & Huber, 1993). According to Miles and Snow (1978) firms implementing a prospector strategy constantly exploit new product and market opportunities. Such firms emphasize effective product design (Miles & Snow, 1984) and growth through innovation. Innovativeness refers to "a firm's tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes" (Lumpkin & Dess, 1996). Flexibility is

an operational priority, and employee involvement is critical (Miles & Snow, 1978). Employees interact with one another at all levels of the organization and work groups are common. In addition, employees often participate in decision-making due to the decentralization.

Effective communication facilitates organizational performance in organizations that employ an innovative business strategy (Tung, 1993). According to Tung, communication competency among diverse populations stems from: (1) a willingness to acknowledge that differences exist; (2) a genuine attempt to understand differences;and (3) a desire to value the differences between groups and subgroups, and to combine the better elements from all groups, thereby increasing organizational effectiveness.

The inclusion of views and efforts from a diverse employee population enhances creativity among work groups (Watson, et al., 1993). The added amount of innovative information provides an economic advantage (Oliver, 1990) and creates a multicultural synergy. This synergy produces integrative solutions that maximize the needs and aspirations of the individual and the organization (Harris & Moran, 1987). Wright, Smart, and McMahan (1995) state that creativity might benefit one firm (e.g., prospector) more than another firm (e.g., defender). Richard, McMillan, Chadwick, and Dwyer (in press) found that an innovation strategy moderated the relationship between racial diversity and firm performance such that racially diverse workforces with an innovation strategy experienced performance gains. Thus, a positive relationship is likely to be observed between visible diversity in general and performance among prospector-innovative firms.

Other strategic types (e.g., defenders) are not as likely to benefit from increased diversity; in fact, we may expect to find a negative relationship. For example, defenders produce a limited set of products directed at narrow market segments. Firms in stable environments implement defender strategies in order to focus their resources on protecting against intrusion by competitors. As such, a defender strategy reduces the demand for innovation. Communication functions to organize task performance and to clarify rules and regulations. Organizational change, including change in the distribution of power and control, seems more difficult because of the tendency to develop shared beliefs that legitimize and institutionalize the existing influence of groups within the organization (Amburgey, Kelly, & Barnett, 1993; DiMaggio & Powell, 1983; Zucker, 1987). For defenders, sudden changes in the current demographic attributes of entering personnel or increased diversity may appear risky and create problems.

In these settings, increasing heterogeneity (i.e., demographic dissimilarity) in human resources would likely result in low satisfaction and higher turnover among employees (O'Reilly, et al., 1989). Tsui and O'Reilly (1989) reported that supervisor-subordinate dissimilarity in demographic attributes such as race, age, and gender relate to subordinates' increased role ambiguity in organizations. Increased work-unit diversity often creates organizational detachment among group members (Tsui et al., 1992, p. 549). For example, Tsui (1990) argues that heterogeneity requires a diverse set of responses which has a constraining effect on organizational effectiveness. In addition, Jackson, Stone, and Alvarez (1992) conclude that demographic heterogeneity has a negative impact for easier performance tasks—characterized by defenders. Also, Ancona and Caldwell (1992) establish that homogeneous

groups stayed on budget and on schedule better than heterogeneous groups. Richard (2000) found that racial diversity did not have a direct effect on firm productivity; however, racial diversity was related to increased productivity and return on assets for those firms that pursued a growth strategy but not a downsizing strategy. In sum, visible diversity in groups have negative implications for performance in defender-type organizations. In aggregate, we believe that because of the innovativeness and flexibility representative of prospectors as opposed to defenders, the apex of the curvilinear relationship between visible diversity and effectiveness shifts upward and to the right. Hence,

> *Proposition 5: Business strategy moderates the inverted U-shaped visible diversity-effectiveness relationships in such a way that firms who use prospector strategies are more effective than firms with defender strategies.*

Organizational Culture

Gaertner, Mann, Dovidio, Murrell, and Pomare (1990) note that when a sense of cooperation and teamwork is induced within the larger group (i.e. organization), intergroup bias, on such dimensions as race and gender, can be reduced. Chatman and Barsade (1995) discuss how organizational cultures may be created that foster cooperation and commitment. Using a business simulation, Chatman, et al. (1997) found that organizational culture moderated the effects of diversity such that conflict arising from group heterogeneity was seen as more beneficial for groups with a collectivistic organizational culture. More recently, O'Reilly, Williams, and Barsade (1997) found that an organizational culture supporting racial diversity improved performance. Williams and O'Reilly (1997), in their extensive literature review on diversity effects, conclude that organizational culture may be "a powerful way for managers to use informational and social influence processes to encourage solidarity rather than divisiveness."

These studies suggest that a diverse workforce will have greater potential to result in a positive impact on firm performance in certain organizational cultures than others. For example, research suggests that cultural diversity can result in increased flexibility, creativity, and improved decision-making. As such, it is likely that cultural diversity will be more effective in companies that exhibit organizational cultures characterized by flexibility, spontaneity, and creativity. For example, Dwyer, Richard, and Chadwick (in press) found that a clan or collectivist type organizational culture moderated the relationship between gender diversity in management and firm performance. Nevertheless, some organizational cultures (e.g., those that exhibit rigidity, inflexibility, and formal rules and policies) may suppress the advantages of diversity, thereby reducing the benefits to organizational effectiveness. Therefore, the following proposition emanates:

> *Proposition 6: Organizational culture moderates the inverted U-shaped visible diversity-effectiveness relationships in such a way that firms who have collectivist cultures are more effective than firms with individualistic cultures.*

What can organizations do to reduce the affective conflict that inhibits organizational effectiveness? Williams and O'Reilly (1997) note that negative consequences can be

diminished and positive effects can be magnified if there is intervention within the group processes. The next section elaborates on some of these interventions.

Programmatic Devices: Diversity Programs and Conflict Management Techniques

Affective conflict does not disappear when it is ignored (Donnellon & Kolb, 1994). Williams and O'Reilly, (1997) emphasize the role that companies can play in countering the potentially negative consequences of diversity. As companies become more culturally diverse, they can socialize newcomers to identify with the organization or subunit in terms of its positive, distinctive, and enduring characteristics. Identification enables the new employees to reify the organization, provide loyalty to it, and support it (Ashforth & Mael, 1989). "Strong social and corporate directives for norms of equality, combined with mandatory nature of task interactions, should prevent overt acts of bias and encourage individuals to participate in the task" (Elsass & Graves, 1997, p. 959). For example, Cox (1991) suggests that firms need new member orientation programs that create a two-way socialization process (multicultural organization) ensuring that (1) bias reduction exists and (2) minority perspectives influence organizational norms and values. It is the multicultural organization in which assimilation becomes favorable because newcomer uniqueness is integrated into the organizational culture (Richard & Grimes, 1996). In addition, bias reduction training to eliminate discrimination and prejudice as well as conflict management training to minimize interpersonal conflict based on group identity (e.g., race, gender, age) aid in the reduction of affective conflict. Such devices are programmatic in nature because they are on-going initiatives that are integrated into organizational processes and structures (Dass & Parker, 1996). Based on the foregoing, the following proposition is advanced for empirical testing:

> *Proposition 7: Programmatic devices such as diversity practices and conflict management techniques moderate the inverted U-shaped visible diversity-effectiveness relationships in such a way that firms that implement programmatic devices are more effective than firms who do not.*

Social scientists have posited that multivariate configurations may offer more complete explanations of organizational phenomenon than those provided by contingency approaches using bivariate interactions to explain, for example, organizational outcomes (Delery & Doty, 1996; Dess, Newport, & Rasheed, 1993). Configurational theory takes a more holistic stance, positing that parts of a social entity take their meaning from the whole and cannot truly be understood in isolation (Delery & Doty, 1996; Doty & Glick, 1994).

Configurational approaches take into account past advances of contingency studies, synthesize them, and ground them in multivariate descriptions (Meyer, Tsui, & Hinings, 1993). These configurations represent higher-order interactions that cannot be captured by traditional bivariate contingency explanations (Delery & Doty, 1996; Doty, Glick, & Huber, 1994). In actuality, configurations of key variables have been found to have more predictive power than bivariate contingency relationships (Dess, et al., 1993). For example, Ostroff and Schmitt (1993) determined that various configurations of organizational processes and external resource attributes are related to firm effectiveness. In addition, Baker and Cullen (1993) found that different configurations of organizational age, size, and growth affect structural change. They conclude that the effects of these three variables cannot be understood alone.

Following configurational theory reasoning, we attempt to explain with regard to organizational effectiveness how relationships emerge from the interaction of the parts—visible diversity, programmatic devices, and leadership effectiveness. We propose that organizational configurations incorporating alignment across these multiple dimensions will experience the largest performance gains.

With regard to the visible diversity dynamics, leaders utilizing such programmatic devices must engage in continuous assessment of self, group members, and the environment. In addition, the leader has to anticipate potential sources of affective conflict in the group employing the appropriate leadership and communication style. Finally, the leader must intervene at the individual, group, or environmental level to resolve the situation when conflict arises based on racial, gender, and age issues.

For diverse groups to function better, several imperatives for intervention should be followed (see Figure 1). First, the leader should recognize the critical importance of racial, gender, and age dynamics of the group and their actions. Second, the leader has to anticipate the sources of tension and assist members in dealing with these conflicts. Last, the leader must be prepared to solve problems if they arise (Davis, Galinsky, & Schopler, 1995).

In sum, the mere presence of programmatic devices within diverse workforces may not be enough to positively influence effectiveness. In fact, in visibly diverse settings, organizational interventions such diversity practices without effective administration and guidance might create more tensions and affective conflict. Recognizing the interplay among visible diversity in groups, leadership effectiveness, and organizational interventions, we believe programmatic devices such as diversity practices and conflict management techniques supplemented with effective leadership within visibly diverse workforces contribute to organizational effectiveness. We offer the following configurational proposition:

> **Proposition 8:** *The configuration of visible diversity, programmatic devices, and leadership effectiveness will influence firm performance through its interaction effect. Visibly diverse groups with programmatic devices and effective leadership will be more effective than groups without such configuration.*

Our model represents a visual depiction of our conceptualization along with proposed paths for each hypothesis (refer to Figure 1 for clarity).

DISCUSSION

Cox (1994) states that the question managers ask most often concerning workforce diversity remains how does diversity and its management affect the bottom-line performance of organizations. More specifically, managers ask whether any concrete evidence supports a positive diversity-performance relationship. This review suggests we are not likely to see a simple direct relationship between diversity and performance, at least not in the early stages of efforts to increase the representation of visibly distinct individuals in organizations. Instead, the effects are likely to be determined by how organizational leaders and how participants respond to and manage diversity. We could posit two contrasting scenarios—a self-reinforcing

vicious circle of negative effects and alternatively, a reinforcing circle of positive effects, depending on the actions taken as part of efforts to increase minority participation and representation in organizations.

Specifically, from low to moderate levels of visible diversity, minority representation is below the threshold level where both the social identity and the similarity/attraction effects have their greatest likelihood of reducing group cohesion and performance. As diversity approaches a balance point, affective conflict increases impeding performance. If there is little or no top management commitment to increasing diversity or active communication of top management's support for the effort, perceptions of procedural unfairness, and stereotyping of visibly distinct individuals, are likely to lead to further internal tensions, insecurities on the part of visibly distinct individuals, and resentment on the part of members of the majority group. These organizational reactions, in turn, will likely produce higher turnover of visibly distinct individuals, lower group/team performance, and higher costs without offsetting productivity, quality, customer satisfaction or other bottom line benefits. Repeated efforts to introduce visibly distinct individuals into this type of setting will reinforce these patterns, repeat the negative cycle, and perhaps strengthen the negative organizational effects. To the extent that cost control considerations dominate the firm's strategy, these effects will be more problematic and dissipate support for further minority recruitment or diversity enlargement efforts.

To counter these effects, management will need to proactively communicate the organization's commitment and reasons for valuing diversity, invest in training, socialization, and other efforts to improve organizational participants' capacity to manage conflicts effectively (e.g., building skills in problem solving and conflict resolution that encourage the surfacing and resolution of substantive conflicts). Over time, these efforts should encourage an organizational culture that respects and values diversity, reduces turnover of visibly distinct individuals, and allows the organization to reach levels of representation where the creative benefits of a heterogeneous workforce begin to be realized. To the extent that the firm's strategy emphasizes innovation and organizational culture promotes teamwork and commitment, the magnitude of the benefits are likely to be greater.

Thus, the central implication of the research reviewed here is that a proactive management and leadership strategy will be needed to get organizations to the point where they can fully exploit and realize the "value in diversity." Absent such an organizational effort, we are likely to remain stuck in a low equilibrium position or a reinforcing cycle in which visibly distinct individuals who are hired have negative experiences in organizations, leave the organization at a higher rate or are perceived to perform at a lower level than their majority peers, and inhibit achieving the level of representation where the potential benefits of diversity are likely to be realized.

It is in the early stages of efforts to recruit and retain a diverse workforce, therefore, that management practices for achieving its diversity objective are likely to have their greatest effect and make the difference between whether diversity has a negative or positive effect on performance at the individual (turnover, individual performance, satisfaction), group (affective/substantive conflict, in-group-out-group reactions, and team performance), and

organizational (achievement of diversity targets, profitability, market penetration, customer satisfaction, etc.) levels.

If these early managerial efforts are successful, minority representation should pass thresholds where the potentially negative effects at high levels of diversity give way to the positive effects of creativity, expanded cultural knowledge and capabilities, and innovation. To the extent that organizational participants have been trained and equipped to take advantage of the benefits of diversity, the payoffs to the organization and to the individuals should be further enhanced and perhaps be realized sooner.

CONCLUSION AND IMPLICATIONS

Research Implications

Our model suggests that future research on diversity and organizational effectiveness will need to take into account the interactions among the variables discussed throughout this paper. Moreover, the effects of these variables and their interactions will need to be examined over time. This implies the need for longitudinal research designs that track organizational efforts and experiences and that encourage active management interventions/experiments to test the effects of different means of countering the negative and accelerating the positive consequences of increasing diversity within organizations. Longitudinal data will be needed at the individual, group/team, and organizational unit levels. Since some of these data are likely to be highly sensitive and confidential, researchers will need to work in close partnership with the organizations involved. Moreover, both qualitative and quantitative research methods will be needed to describe and measure the effects of organizational interventions and the dynamics they produce. This implies the need to study specific organizations intensively, over time, at multiple (individual, group, and organizational) levels, using multiple methodologies.

Practical Implications

Understanding the determinants of cultural diversity may help organizations to tap into diverse labor pools across dimensions of race, gender, and age. As these numbers increase however, it is important for firms to understand how to manage diversity. This study offers several possible ways to manage diversity. First, it is important that managers understand the implications of different business strategies and their impact on diversity's relationship with organizational effectiveness. Some strategies, such as a prospector strategy, are more compatible with diversity for organizational benefits. Second, managers must understand that organizational culture also plays an important role in influencing the diversity-effectiveness relationship. Certain organizational cultures are more conducive to realizing diversity's full potential, thereby contributing to effectiveness. Finally, programmatic devices can be designed to help reap the benefits of a diverse workforce.

While we have documented that cross sectional studies that measure the direct relationship between diversity and organizational outcomes are not likely to find consistent positive effects, this does not imply that increasing diversity should not be in the interests of the business community. The "business case" for diversity lies at a more aggregate/collective

level and perhaps in a more long term time horizon than can be captured in any single cross sectional, firm or work unit level correlation.

This "case" can be summarized as follows. Society expects all institutions, including business organizations, to provide equal opportunities for visibly distinct individuals and, over time, to increase their organizational representation. Over time, labor and product market demographics will further increase the need to attract and retain a diverse workforce. Thus, in the long run, it will become more essential for organizations to be effective in attracting, retaining, and managing a diverse workforce. It would not be at all surprising to find evidence of limited benefit, and perhaps even of financial and interpersonal costs at extremely high levels of diversity. The benefits of these efforts are likely to be realized not immediately, but at a future point in time once the organizational capabilities that can support diversity are reached and minority representation is at the appropriate threshold for the benefits of increased creativity and innovation to occur. To the extent that many firms invest in similar efforts, the benefits are likely to be realized more quickly and shared more widely as individuals move across organizations with the capabilities needed to function effectively in diverse environments. By identifying some of the adjustment costs experienced by organizations, research may be able to help other enterprises avoid or reduce those costs. Thus, through collective action, the risks of the early investors are lowered and time lags in realizing the benefits are shortened creating possibilities for a sustainable competitive advantage. The implication is that collective leadership and/or peer pressure is needed from CEOs and other opinion leaders in the business community to produce the virtuous cycle resulting in the sought-after positive relationship between diversity and organizational effectiveness.

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