MANAGING WORKTEAM DIVERSITY, CONFLICT, AND PRODUCTIVITY: A NEW FORM OF ORGANIZING IN THE TWENTY-FIRST CENTURY WORKPLACE

Karen A. Jehn

I. GROUPS AS A NEW ORGANIZING STRUCTURE

To stay competitive in a dynamic business environment, organizations need to realize a new structural form that utilizes teams and task forces, which embrace diversity and constructive conflict. This organizational form will reduce costs and maximize flexibility and employee diversity. This, in turn, will enhance creative problem solving, the invention of enterprising innovations, and the leveraging of different viewpoints and employee backgrounds (including race, gender, and nationality). To be effective, this workgroup form depends on rich synchronous communication to a much greater extent than on more traditional hierarchical and centralized organizations. Historically, organizations have been based on power and status differentials, which have inhibited open communication and criticism. This article discusses the importance of diversity and constructive conflict incorporated in this new organizational form—workteam management.

Groups are fundamental to today’s organizations. For example, Motorola realized that it needed to switch its traditional hierarchical structure to a team-based structure to be competitive in a global market. Motorola now successfully utilizes a structure based on high-performance, often cross-functional, teams. Teams provide forums for sharing

† Associate Professor of Management, The Wharton School, University of Pennsylvania.

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information across functional and regional boundaries that would not otherwise be formally linked. In addition, groups have become important vehicles for identifying quality solutions to emerging organizational problems. In large part, the use of groups as fundamental building blocks of organizational structure and strategy appears to be premised on the assumption that groups can gather together the diversity of information, backgrounds, and values necessary for producing effective organizational action. However, achieving this goal is not always as easy as it sounds.

II. DIVERSITY, WORKGROUP CONFLICT, AND PRODUCTIVITY

A diverse workforce greatly benefits organizations, but requires a new form of management and organization in order to realize its potential. By 2005, women will constitute 48% of the workforce, and racial minorities will enter the civilian labor force at a much faster pace than whites. As this article later explains, a diverse workforce is an advantage that organizations cannot ignore if they want to stay competitive in domestic and global markets. However, diversity brings with it new challenges that the homogenous, bureaucratic organizations of the past are not adequately addressing.

There are many benefits of diversity. Social interaction among diverse perspectives can lead to deep conceptual restructuring and new insights. However, increased productivity, creativity, and enhanced morale depend not only on the presence of diverse viewpoints and perspectives about the task, but also upon the effective management of the conflict that arises due to these forms of diversity, as well as the smooth implementation of the new and improved ideas.

Past diversity research has generally examined demographic characteristics in groups and related this to various group outcomes, but the results linking group diversity and performance are inconclusive due to mixed findings. Some studies show that diversity in tenure, educational background, functional background, and ethnicity improve group performance. Other studies show that tenure, age, and ethnic diversity...
decrease performance.\textsuperscript{5} Still other studies show that tenure, age, sex, and ethnic diversity lead to higher turnover, higher absenteeism, and lower levels of satisfaction.\textsuperscript{6} This article presents a model that includes a broader range of diversity characteristics and includes the processes by which diversity is beneficial in organizations to explain the above contradictory and confusing findings.

III. DIVERSITY IN WORKTEAMS

Demographic attributes usually consist of age, sex, race, education level, work experience, and organization tenure. In this paper, "social category diversity" refers mainly to visible demographic characteristics such as age, sex, and race; "informational diversity" refers to differences among individuals related to education level, work experience, and organization tenure. "Goal diversity" includes differences related to underlying work values and goals related to projects with which the team is involved.

In dealing with social category diversity, unfortunately, people often use visible demographic characteristics (such as race or gender) for categorization processes, which may cause hostility, anxiety, and stereotyping.\textsuperscript{7} While visible characteristics are often not relevant to completing the given task, they do shape people's perceptions and behaviors through mechanisms of categorization and prejudice.\textsuperscript{8} Self-
categorization theory, social identity theory, and Byrne's similarity/attraction paradigm all concern how group members react to visible demographic characteristics. Self-categorization theory posits that individuals classify themselves and others into familiar categories (such as women or whites) in order to make predictions about subsequent interactions. Too often, such classification results in stereotyping.

Informational diversity includes underlying attributes of individuals such as work experience and education that provide the individual with information. The information/decision making perspective suggests that diversity will have positive implications on workgroup outcomes since the group will have access to a wider array of views, skills, and information. Educational background, functional background, and industry experience are all linked to the set of skills one employs when undertaking a task. Integrating these differences in skill is important for members to work together effectively as a team.

A third form of diversity, "value diversity," occurs when members of a workgroup differ in terms of what they think the group's real task, goal, target, or mission should be. In many cases, these differences influence conflict. However, similarity in group members' goals and values enhances group cohesiveness and commitment to the group. For example, a research and development team may be composed of three older white males and one younger Hispanic female (high social category diversity) of similar education and work experience (low informational diversity) who have different values and goals (high value diversity).

IV. CONFLICT IN WORKTEAMS

There has been a debate in organizational research regarding whether agreement or disagreement within groups is advantageous. Conflict researchers have recently found that while relationship conflicts based on personality clashes and interpersonal antagonism are detrimental to group performance and morale, task conflicts are often beneficial.
“Relationship conflicts” are disagreements and incompatibilities among group members about personal issues that are not task-related. Relationship conflicts are frequently reported about social events, gossip, clothing preferences, political views, and hobbies. This type of conflict often includes personality differences, animosity, and annoyance between individuals. “Task conflicts” are disagreements among group members’ ideas and opinions about the task being performed, such as disagreement regarding an organization’s current hiring strategies or the information to include in an annual report.

There are many group-related activities, some having to do with the actual task and others having to do with the process of doing the task or delegating resources and duties. “Process conflicts” are about logistical and delegation issues such as how task accomplishment should proceed in the work unit, who is responsible for what, and how things should be delegated. In a previous article, this author delineated between task and process conflict based on findings of an ethnographic study of work groups. Considering once again the previously discussed research and development team, when the four researchers disagreed about data interpretation and the meaning of the results, they were experiencing task conflict. If they argued about who was responsible for writing the final report and who would make the presentation, they were having a process conflict. Disagreements about the fastest route to work, the best automobile on the road, and the intelligence level of anyone who would take the bus (which one member did) are relationship conflicts.

V. LINKING DIVERSITY TO CONFLICT

Recent work has addressed the need to explain the impact of diversity on group outcomes. Conflict is often the reason diversity influences both positive and negative outcomes. Pelled found that functional background and educational diversity influence task conflict. Diversity in the
dimensions of sex and ethnicity, however, is related to more interpersonal tension, lower levels of friendliness, and lower levels of commitment.\(^{18}\)

"Informational diversity" refers to differences in knowledge and perspectives that group members bring to the group. These differences among group members are due to their past education, experience, and expertise. Differences in educational background, training, and work experience increase the likelihood that diverse perspectives and opinions will be discussed in a workgroup. Attributes such as educational level and work experience often dictate how one thinks about and undertakes tasks. Individuals who have worked as financial analysts will have a very different mindset than those who have worked in personnel and will tend to approach tasks differently. Informational diversity is likely to cause task-related conflicts. When an individual is different from other group members with regard to educational training and functional area of work experience, she will have different viewpoints. She may be trained to identify and solve problems using methods particular to her discipline which may be very different from those of other group members. Unfortunately, workgroups often fail to realize the benefits of informational diversity and task-related conflict. Groups with diverse members often prove ineffective at capitalizing on the benefits of their informational diversity. Managers experience frustration with the time and resource demands of cross-functional teams. Even in groups demonstrating performance benefits from membership diversity, group members report finding the experience frustrating and dissatisfying.\(^{19}\) At issue here is the fact that what makes a group informationally diverse may also make that group diverse in other ways that prevent it from realizing the benefits of its informational diversity. Process conflict also prevents groups from ever effectively discussing their potentially productive disagreements about what to do.

While informational diversity is clearly an important resource for teams and organizations, "social category diversity" is more commonly associated with demographic studies and the general notion of diversity. Social category diversity refers to explicit group member differences in social category membership, such as race, gender, and ethnicity. Social category diversity is likely to influence group interactions by virtue of social identity effects. According to social identity theory, group members

\(^{18}\) See Sheryle W. Alagna et al., Perceptions of Functioning in Mixed-Sex and Male Medical Training Groups, 57 J. MED. EDUC. 801-03 (1982); Christine M. Riordan & Lynn McFarlane Shore, Demographic Diversity and Employee Attitudes: An Empirical Examination of Relational Demography Within Work Units, 82 J. APPLIED PSYCHOL. 342-58 (1997); Tsui et al., supra note 3.

establish a positive social identity and confirm affiliation by showing favoritism for members of their own social category, in effect, via discrimination and self-segregation that disrupts group interaction. This occurs because categorizing people based on visible attributes draws attention to features of an individual which may be irrelevant to the task at hand. For example, referring to someone’s age when discussing an issue may make some people uncomfortable and create resentment among group members.

The more different an individual is from other group members on a given demographic characteristic, the more likely there will be relationship conflict. Such conflict occurs because people are attracted to those who are like themselves. People find it easier to work and communicate with those who are similar to them. People assume that those who are like them share the same values. In contrast, individuals often generate negative evaluations about those who are different from them. These perceptions and categorizations are the basis for miscommunication and negative attribution—valuable time and attention is spent on rectifying problems that occur based on interpersonal relationships that are not task-related. Jehn, Chadwick, and Thatcher examined diversity in project teams using the visible and informational diversity distinction. Their results demonstrate that members in visibly diverse groups have more relationship conflicts than members in groups that are visibly similar.

The similarity of values among group members has been shown to influence the amount of conflict within the group. Because values guide behavioral choices, group members who share similar values are more likely to agree about group actions. Values also act as perceptual filters; therefore, group members with similar values prioritize and interpret group problems and events in similar ways. This reduces both task and process conflict. Value differences increase relationship conflict because members have different values regarding the workgroup and its goals. Group members often take these differences personally, resulting in interpersonal animosity. Take our example of the R&D team composed of three white males and one Hispanic female, all of whom have similar backgrounds, but different goals for the research program. One can imagine there will be task and process conflict about how and what to get done, and possibly some relationship conflict if the men in the group have stereotypes about women or Hispanics, or vice versa. The basic model is shown in Figure 1.

21. See Jehn et al., supra note 16.
22. See Jehn, A Multimethod Examination of the Benefits and Detriments of Intragroup Conflict, supra note 12; Pelled, supra note 8, at 619-25.
A. *Conflict in Diverse Workteams and Performance*

Objective performance is the productivity of the group which can be measured by objective criteria (such as completed products, return on investment, and customer return). Management researchers often examine performance, defined as group members’ perceptions of how well they think they are performing. Oftentimes, the way that people perceive they perform and how they actually do perform can be quite different. Thus, this article investigates the two separately. Employee morale includes members’ attitudes about their jobs and their teams.

1. Effects of Relationship Conflict

As previously stated, relationship conflicts are disagreements and struggles among group members about personal issues that are not task-related, such as personality differences. While relationship conflicts are focused on interpersonal problems, they also detract from task-related efforts in interdependent teams.\(^{23}\) Interpersonal problems use up energy

\(^{23}\) See Jehn, *A Multimethod Examination of the Benefits and Detriments of Intragroup*
and effort that could be expended toward task completion. Effort is misplaced on squabbling, avoiding, or resolving the interpersonal issues rather than focusing on task completion. Relationship conflict causes extreme group process problems and results in less time devoted to the task at hand. Negative emotional reactions to relationship conflict will also negatively bias members' perceptions of team outcomes.

In addition, personal attacks cause great unhappiness among individual members. Members do not feel comfortable working in a group in which members are attacking one another. Previous research has shown that relationship conflict has negative effects and is responsible for outcomes such as increased turnover, high rates of absenteeism, decreased satisfaction, low levels of perceived performance, poor objective performance, and low commitment.24

2. Effects of Task Conflict

Disagreements over group members' ideas and opinions about the actual task being performed are forms of task conflict. Task conflict, which is focused on content-related issues, can enhance performance quality. For example, avoiding discussion about a task can lead to conditions of "groupthink"—a lack of critical questioning and thinking that hinders the group's ability to come up with interesting, creative, and thoughtful solutions to problems. Critical debate among members and open discussion regarding task issues increases group performance because members are more likely to offer and evaluate various solutions, thus reaching optimal decisions and outcomes. Workgroups benefit from the increased debate about ideas and viewpoints. Conflict in any form can create an uncomfortable environment, decreasing individuals' satisfaction and their perceptions of teamwork. When members feel discomfort with the group process and dissatisfaction with the group experience, they are more likely to believe that they have performed at lower levels than members who enjoy the experience. Discomfort causes groups with high levels of task conflict to perform well objectively, but to have low levels of satisfaction and low perceptions of performance.

3. Effects of Process Conflict

While process conflict may seem closely related to task conflict in that the issues are related to task strategy and accomplishment, process conflict

Conflict, supra note 12.

operates more like relationship conflict in its connection to performance and satisfaction in organizational teams. Process issues revolve around people. *Who* does something includes discussion about an individual's abilities, skills, and even values that can feel personal. Small amounts of process conflict that are easily resolved improve performance because the teams take time to assign the right person to each task.

**B. Experiences with this Framework**

I have examined the above framework of workgroup diversity, conflict, and productivity in a number of research settings with my collaborators, Sherry Thatcher, Clint Chadwick, Margaret Neale, and Gregory Northcraft.

1. **Study 1: Diversity, Conflict, and Group Outcomes in Project Teams**

   In a study of business students, we investigated value diversity, social category diversity, and informational diversity among group members.\(^2\) We examined whether it was beneficial for members to be different or alike, and to agree or disagree. Our results showed that social category diversity (e.g., sex or age) increases relationship conflict, while informational diversity (e.g., education) increased task-focused conflict. Value diversity increased both relationship and task conflict. The specific content of the values held by members, however, influenced performance. Specifically, both detail and outcome group value orientations increased objective performance. Values promoting outcome, decisiveness, and stability orientations increased perceptions of high performance. Decisiveness and supportiveness orientations increased the satisfaction level of group members.

2. **Study 2: Diversity, Conflict, and the Context of Project Teams**

   This study of 533 project teams over a fourteen-week period was intended to expand knowledge regarding individual differences and group outcomes in teams, building upon Study 1. In addition to examining the link between diversity and conflict, we examined the effects of: 1) the team on individuals within the team, and 2) management training interventions. In this quasi-experiment, we intervened to train team members in groups to encourage open discussion and to teach norms that promote the acceptance of constructive task conflicts. The control groups did not receive this

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25. See Jehn et al., *To Agree or Not to Agree*, supra note 16.
Once again, we found that informational diversity increased task conflict and social category diversity increased relationship conflict. We examined both an individual's differences from other members and the average level of diversity in the entire group. For example, imagine a group with five members. If Individual A has a high relational demography score based on his country of origin (e.g., India), it suggests that he is very dissimilar from the other members of the team regarding his country of origin. Individual A will have the same score regardless of whether his teammates are all from one country (e.g., the United States) or from different countries (e.g., two from Australia, two from Japan, and one from the United States). However, depending on the particular makeup of this group, Individual A may experience things very differently. This argument is linked to the idea that proportions (or the composition of races, ages, genders, educational levels, etc.) are an important way of understanding the effects of diversity in a group. The focal individual may experience less relationship conflict in the team overall because everyone else is similar. We expect group diversity to moderate the relationship between individual differences and conflict. Therefore, in general, we propose that group-level diversity moderates the relationship between individual differences and conflict, such that an individual who has demographic differences is more likely to experience conflict in a diverse group than in a more homogeneous group.

We also examined group norms about the acceptance of conflict (e.g., "Conflict is accepted in our workteam." "It is okay to discuss task-relevant conflicts."). Discussions about conflict are often avoided within groups; however, open discussions about task-related conflict can be helpful within groups. We manipulated the norms within the workgroups regarding diversity and conflict handling by providing a very simple training session regarding our model of the benefits and detriments of diversity and conflict in workteams. We found that open communication norms regarding task-related differences increased performance. When a group fosters norms in which task differences are accepted, the discussions are well-managed and produce positive results. Groups with open communication norms investigated various alternatives and subsequently excelled at their tasks.

In addition, our study supported prior findings that relationship conflict decreases performance and morale. Task conflict also decreased morale and perceived performance, but increased objective performance slightly. Process conflict decreased performance and morale.

Discussions about conflict are often avoided within groups.26

however, recent research has suggested that open discussions about task-related conflict can be helpful within groups. Jehn's 1995 study found that open communication norms regarding task-related differences increased performance.\textsuperscript{27} When a group fosters norms in which task differences are accepted, the discussions are well-managed and produce positive results.\textsuperscript{28} For example, in Jehn's 1997 study, a group with open communication norms investigated various alternatives and subsequently excelled at their tasks.\textsuperscript{29}

3. Study 3: An Organizational Study of Diversity in Workgroups

In this field study, we examined a more complex model of diversity. In general, our findings indicated similar results to the project teams; however, we found moderating effects of task type, team member interdependence, and other organizational structure variables. The participants were all of the 545 employees of one of the top three firms in the household goods moving industry. The response rate of the survey was 89\% (485 employees) which included 92 work units. In this firm, employees work in units (teams) to complete tasks.

In this study, we looked at the relationship between the types of diversity and optimal team management for high performance and longevity. For example, we proposed that informational diversity is more likely to increase performance when value diversity and social category diversity are low than when they are high. In effect, low value diversity and low social category diversity create conditions for a workgroup to take advantage of its informational diversity. The results are interesting. As expected, informational diversity enhanced performance, especially when value diversity was low. Social category diversity increased morale. That is, members who differed from one another in age and gender were more satisfied in their groups than members of homogeneous groups. We suggest that this is due to the enjoyment members received participating with members of the opposite sex, especially where age differences existed. In addition, these groups perceived their performance as being quite high, which would also be associated with high levels of morale.

The effects of workgroup diversity on workgroup performance are likely to be affected by the structural aspects of the task. There is evidence suggesting that when the technology of a task is well understood, group members can rely on standard operating procedures so that debates about

\textit{Conflict, 15 PROF. PSYCHOL.: RES. & PRAC. 664 (1984).}

\textsuperscript{27} See Jehn, \textit{A Multimethod Examination, supra note 12.}

\textsuperscript{28} See Karen A. Jehn, \textit{A Qualitative Analysis of Conflict Types and Dimensions in Organizational Groups, supra note 13.}

\textsuperscript{29} See \textit{id.}
task strategy are likely to prove disruptive and counterproductive. This is consistent with Jehn’s finding that process conflict interferes with the effective performance of routine tasks. However, when the technology of the task is not well understood, discussing and debating competing perspectives and approaches can be essential for group members in identifying appropriate task strategies, and in increasing the accuracy of members’ assessments of the situation.

In addition, complex tasks are more likely to benefit from task-related debates than are nonroutine, simple tasks; therefore, complex tasks are more likely to be enhanced by the dialogues of informationally diverse members. Such complex tasks require problem solving, have a high degree of uncertainty, and have few set procedures. In contrast, routine tasks have a low level of variability, are repetitive, and are generally familiar and done the same way each time. As discussed earlier, constructive discussions and debates, such as those needed to accomplish complex tasks, are dependent upon the availability of information diversity.

Prior research also suggests a role for task interdependence on diversity effects in workgroups. “Task interdependence” is the extent to which group members rely on one another to complete their jobs. When tasks are interdependent, the demand for smooth interaction among group members (communication, cooperation, and coordination of effort) is heightened. This suggests that the proposed interfering roles of value diversity and social category diversity will be exacerbated when tasks are interdependent. In other words, the inhibiting effect of value and social diversity on the positive relationship of informational diversity and performance is enhanced when members must interact closely to perform a task. Similarly, because task interdependence heightens the interfering role of value diversity and social category diversity on group interaction, task interdependence should also strengthen the negative effects of value diversity and social category diversity on workgroup morale.

VI. CONCLUSIONS

Viewing organizations as a collection of groups and teams, we refocus on the smooth interaction of equal, but often different, individuals rather than on hierarchy and power structures. By examining various forms of diversity (informational, social category, and value), we are able to understand the complex way in which people interact and the various types of conflicts (task, relationship, and process) that result. The summary of our research findings informs managers, team leaders, and organizational theorists. Teams that focus on differences in individual work experience,
educational training, and functional expertise (informational diversity) are able to constructively debate in an accepting setting (task conflict). This promotes effective interaction and group performance. However, teams that focus on differences in gender, race, and age (social category diversity) are more likely to stereotype and interpret things in a personal manner that is often destructive (relationship conflict). Teams that hold similar values about work and group goals are much less likely to debate about resource and work allocation (process conflict) and less likely to engage in personal attacks (relationship conflict). The profile of a high-morale, high-performing organizational form is a work team that focuses on individual experience and knowledge rather than on visible differences and the prejudices often (unfortunately) associated with them. Discussing and agreeing on work goals and strategies, as well as the rules or norms for debate and giving constructive feedback, is critical in the management of effective, diverse teams.