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GROUP MEMBER DIVERSITY AND GROUP PROCESSES: A CONTINGENCY APPROACH

by

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GROUP MEMBER DIVERSITY AND GROUP PROCESSES: A CONTINGENCY APPROACH

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Abstract

This paper reviews the current research and theory on group diversity and group processes. It is argued that whereas the diversity management literature largely advocates an organization-wide approach to diversity, researchers and practitioners should instead approach diversity from a group process contingency approach. A model of diversity, group processes, and moderator variables is presented. Finally, implications for diversity management and for future research are discussed.

This paper reflects the views of the author and should not necessarily be construed to represent the official position of the Department of Defense or any of its agencies.

GROUP MEMBER DIVERSITY AND GROUP PROCESSES: A CONTINGENCY APPROACH¹

Diversity management is an important consideration in today's organizations. Diversity is usually defined as category or affiliation--"people who collectively share certain norms, values, and traditions that are different from those of other groups" (Cox, 1993, pp. 5-6). US West defines diversity more broadly as

a culture that promotes mutual respect, acceptance, teamwork and productivity among people who are diverse in work background, experience, education, age, gender, race, ethnic origin, physical abilities, religious belief, sexual affectional orientation and other perceived differences ... diversity mirrors the communities in which we work and the customers we serve (Caudron, 1992, p. 40).

A recent taxonomy of diversity differentiates observable attributes (e.g., race, ethnicity, gender) from less visible underlying attributes (e.g., education, ability, socioeconomic background, values) (Milliken & Martins, 1996).

Diversity management, however, has commonly focused upon an organization-wide level of analysis. Workforce diversity is thought to enhance customer awareness, bring greater perspectives on cost effectiveness, create a competitive edge, and produce better marketing strategy, resulting in greater market share and profitability (Cox, 1993; Gordon, 1995; Morrison, 1992).

Diversity and Group Variables

There has been some emphasis on a group level of analysis (Milliken & Martens, 1996). It is argued here, however, that the group level is perhaps more important for understanding diversity effects than an organizational level. This is because much of the essential work in organizations is done in workforce groups: quality teams, staff groups, autonomous work groups, and project teams (Knouse & Chretien, 1996).

At the group level, diversity among members should theoretically at least lead to more variety in approaches, more creative and innovative ideas, and greater perspectives on problem solving (Cox, 1993; Morrison, 1992; Triandis, 1995). Moreover, quality of group decisions should increase because diverse members can introduce challenges and counterarguments to refine group decision making (Nemeth, 1986).

Types of Diversity

Much of the diversity management literature lumps varying types of diversity together. Recent research is showing differing results based upon types of diversity. For example, members may react to visible differences (race, gender) differently than underlying attributes (e.g., ability) (Milliken & Martins, 1996).

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One particular category of diversity with unique properties is disability. Group members may react to disabled members more strongly than any other type of diversity. Moreover, how the disabled member interacts with other members (e.g., quietly, benevolently, helplessly, hypersensitively) tends to influence how the others respond in turn (Stone & Colella, 1996). A recent study showed that work groups with disabled members registered more negative perceptions of cohesiveness and effectiveness than groups with any other diversity category (Knouse, 1996). Therefore, special team building efforts may be necessary for groups with disabled members to heighten awareness and understanding of the disability and the disabled members' contributions.

Another factor is percentage of types of diversity in the work group. Knouse (1996) working with military units found that there appeared to be an optimal level of diversity in the group ranging from 10 - 30%. Theoretically, the group dynamics literature has termed this the "psychological minority phenomenon" where the established majority feels comfortable with minority influence (Davis, 1980). Some have termed a 20% minority as the "critical mass" where groups suffer minimal disruption and conflict (Kanter, 1977). More recent thought, however, emphasizes the complexity of the situation in evaluating any optimal diversity level in groups; one must consider strength of stereotyping, group member competence, and status differentials within the group (Levine & Moreland, 1995).

Diversity and Cohesiveness

Diverse members who feel psychologically attached to the group (more cohesive) should feel more comfortable about introducing new and different ideas (Milliken & Martins, 1996). At the same time, however, diversity can dampen group activity. In particular, diversity of members with their varied backgrounds can make the coalescing of these members into a cohesive team more difficult.

There are several theoretical explanations for this problem (Cox, 1993). First, diverse groups have less status congruence (i.e., members taking on expected roles). Instead, they are more likely to have status incongruence (e.g., women in leadership positions). Second, there is less perceived similarity among members upon which to build interpersonal attraction. A third explanation involves social comparison. Members have more difficulty establishing their identity with the group for purposes of making evaluations (i.e., comparisons with others) of their performance.

Diversity and Communication

An important factor in diversity and group performance is communication. Diversity theoretically introduces potential communication problems, such as greater difficulty in understanding among members, exclusion of some members from group interactions, and divergent communication styles (Larkey, 1996). Furthermore, members of diverse groups tend to communicate more formally and less often with each other (Milliken & Martens, 1996). Thus there may be less sharing of information important for group success.

Moderators of Diversity and Performance

Much of the diversity literature treats diversity and performance as monolithic factors that act fairly consistently regardless of organizational environment (Larkey, 1996). On the contrary, there are a number of variables that can moderate the effects of diversity in groups.

<u>Climate of the Organization</u>. The diversity management literature emphasizes organizational climate (i.e., corporate attitude toward differences and discrimination) as a primary factor in diversity (Cox, 1993). It is argued here that organizational climate also sets the stage for diversity effects in groups. The organizational environment for tolerance of diversity differences and for support of diversity will in part influence the tendency of members to interact actively in groups.

Intragroup Roles. Intragroup roles may be significant. Large power differentials in roles (e.g., a powerful group leader) can deflate the influence of minority communication in the group (Levine & Moreland, 1995). The prevalence of status congruence as opposed to incongruence can be important. If group members are diverse but fulfill roles meeting each others' expectations, cohesion may not be adversely affected. For example, if women take nurturing roles, or minorities take the role of interpreter of minority views (e.g., minority customer needs), role conflict may not develop. If, however, women actively strive for leadership roles and white males try to interpret minority needs, conflicts over perspectives may develop, detracting from cohesion.

<u>Time Frame</u>. The time frame for the work may also be significant. An interesting longitudinal study of the activity of diverse groups found that heterogeneous groups (racial and ethnic mix) were less effective than homogeneous groups for the first 17 weeks of work. After 17 weeks, however, the heterogeneous groups were better at some aspects of task performance, such as problem perspectives and range of possible solutions (Watson, Kumar, & Michaelsen, 1993). One speculation is that cohesion, and hence interaction styles, took longer to develop in the diverse groups.

<u>Task Requirements</u>. Another factor is task requirements. In part, the type of work dictates the direction the group will take. Conjunctive tasks (Steiner, 1972) requiring interdependent interaction will require more of the expanse of perspectives supplied by diverse group members. On the other hand, additive tasks, where group members can work independently of each other, may not benefit from the advantages of diversity. Therefore, conjunctive tasks may require more group cohesiveness than additive tasks.

Routinization may also play a role. Routine group tasks, such as standardized inspection of materials or filling out reports, may require little communication interaction as the procedures are usually established with little discretion required. Group members can perform their roles relatively independently. New tasks, such as problem solving-particularly for quality problemsrequire individuals to work closely together. Hence, routine work may require little group cohesiveness, while successful group problem solving may require a high degree of cohesiveness and extensive communication interaction in order to bring out new and unique information. Work that generates competition can also be a factor. Competitive tasks strengthen the emphasis on diversity category perceptions and create coalitions along gender and ethnicity lines, while cooperative tasks tend to bring the group together (Larkey, 1996).

Model of Diversity and Group Variables

Based upon the previously mentioned relationships, the following model of the influence of diversity upon group activity is presented in Figure 1.

Diversity o Type o Percent	~ ↑ ↑	Cohesion	Ŷ	Communication	↑ ↑ ♦	Performance		
Organizational		Task						
Climate		Requirements						
Intragroup Roles			o Type					
Work Time Frame			o Routinized					
o Competitive					ve			
Diversity and Group Processes								
Figure 1								

Discussion

Implications of the Model for Team Building

As with the group relationships of diversity and effectiveness, the diversity management literature mostly advocates universal team building activities, regardless of the situation (e.g., Gardenswartz & Rowe, 1993). The model presented here indicates that differing types of diversity team building are required by differing situations.

One implication of the model is that there is an inherent conflict between the congruence of intragroup roles and the effectiveness of diversity for group problem solving. If the roles are congruent (i.e., women and minorities take "appropriate" or stereotypical roles), group cohesion building can proceed with little initial conflict, but the essential advantage of diversity for the group (i.e., women and minorities offering varied and unique perspectives) will be lost. Therefore, if problem solving is a primary task consideration, cohesion team building should emphasize group members taking on nontraditional roles in order to communicate unique perspectives. The upshot is that cohesion building must proceed slowly.

Another implication is that the appropriate team building activities depend upon the type of task the group is taking on. Routinized tasks may require little cohesiveness and intermember communication. Therefore cohesion building is less important for the group. On the other hand, problem solving tasks may require group cohesion for members to feel comfortable enough for different individuals to contribute unique ideas. Therefore, problem solving teams may require extensive team building in terms of cohesion and communication enhancement.

The Role of Cohesion in Improving Performance

Group cohesion and performance tend to be associated in the group dynamics literature as jointly preferable states (Mullen & Cooper, 1994). It can be argued here that this is not always an ideal case, particularly in terms of group member diversity. Strong cohesion can lead to pressure to conform (the extreme case is, of course, groupthink; Janus, 1982), which can detract from the advantages of having diverse members (such as introducing unique perspectives and ideas). Moreover, pressure to conform can emphasize the standards of the group majority (e.g., white males) leading to a divergence of communication interaction away from minority members (Larkey, 1996).

Therefore, a lack of cohesion, at least in terms of conformance to norms, may be desirable in diverse groups working on some types of tasks, such as problem solving tasks. Furthermore, some groups, such as quality teams, may be purposely set up on an *ad hoc* basis to solve a particular quality problem and be disbanded once the solution is implemented. For these groups extensive interpersonal cohesion building efforts may be counterproductive.

The question then becomes how can diverse groups perform well in the absence of strong interpersonal cohesiveness? The answer may lie in the concept of task cohesion rather than interpersonal cohesion. Task cohesion is defined as the group members valuing the group because they have the opportunity to work competently on tasks with effective coworkers (Bernthal & Insko, 1993). In essence, task cohesion is the group members' attraction to the group task (Zaccaro, 1991). Indeed, task cohesion is enhanced in groups with individuals of different skills and backgrounds who can make unique contributions to group problem solving (Bernthal & Insko, 1993). Group member diversity and task cohesion thus appear to go hand in hand.

A recent study showed that high task cohesive groups communicated more efficiently and faster, exchanged more information, and were better coordinated than low task cohesive groups (Zaccaro, 1995). In terms of the present model in Figure 1, task cohesion may enhance some aspects of communication, which in turn would translate into better group performance.

One possible means of producing task cohesion is goal setting (Fandt, Richardson, & Conner, 1990). Recent research shows that group goal processes are a more immediate determinant of group performance under varying task levels than interpersonal cohesion (Klein & Mulvey, 1995). In fact, group commitment to commonly held goals may be a basis for building greater cohesion in otherwise disparate groups. Interdependent goals among group members may also be effective (Campion, Papper, & Medsker, 1996), as well as group goals facilitating individual goals (Zaccaro, 1995).

Another factor in task cohesion is unique group procedures (Bernthal & Insko, 1993). Traditional problem resolution techniques may have to be modified. One example is consensus, which generally lends itself well to a cohesive group environment. The traditional type of consensus, where all members agree on the solution, may have to be revised, however, since strong agreement may be impossible to achieve in a diverse group. Therefore, consensus may have to be redefined for diverse groups as all members can "live with" the decision, rather than everyone must embrace the decision. Moreover, calling a vote on alternative solutions can magnify differences of opinion and thus polarize members and should be avoided (Gardenswartz & Rowe, 1993).

Future Research

Diversity is becoming increasingly more broadly defined, including observable, invisible, and even expected characteristics (Milliken & Martens, 1996). Perhaps the time has come for developing taxonomies of diversity to guide research. In particular, with the Americans With Disabilities Act of 1990, the special needs and influence of disabled members should be examined in group research.

It has been argued above that at least in some situations strong interpersonal cohesiveness may be counterproductive. Research should examine the processes and performance of diverse groups under high and low social and task cohesiveness for various moderator variables, such as time frame and task requirements.

Communication may well be a primary process for understanding how diverse groups operate. Models, such as Larkey's (1996), map out variables of interest, such as the influence of organizational climate, group member cognitions, and communication styles upon understanding, communication patterns, and communication networks. In addition, effective communication of feedback to group members on ideas can build symbiotic interactions and thus increase the variety of information individuals contribute during problem solving (Gardenswartz & Rowe, 1993).

The type of task appears to be a crucial moderating factor in the influence of diversity on group performance. Focusing on task requirements in researching team development and in evaluating team performance would seem to be a primary concern.

Finally, there should be more longitudinal studies of the Watson et al. (1993) type. Cohesion appears to develop differently in diverse groups in comparison with homogeneous groups. In addition, group processes, such as interpersonal communication, appear to evolve somewhat differently. Research needs to examine how these processes operate over time.

Conclusion

Many of the current models of diversity in organizations take a monolithic organizationwide approach. It is argued here that diversity research and application need to take a more micro-oriented, contingency approach. The group level should be the focal point for studying how various types of diversity interact with group process and task variables in influencing work performance.

References

- Bernthal, P. R., & Insko, C. A. (1993). Cohesiveness without groupthink: The interactive effects of social and task cohesion. Group and Organization Management, 18, 66-87.
- Campion, M. A., Papper, E. M., & Medsker, G. J. (1996). Relations between work team characteristics and effectiveness. *Personnel Psychology*, 49, 429-452.
- Caudron, S. (1992). US West finds strength in diversity. Personnel Journal, 71(3), 40-44.
- Cox, T. (1993). Cultural diversity in organizations: Theory, research, and practice. San Francisco: Berrett-Koehler.
- Davis, L. (1980). When the majority is in the psychological minority. Group Psychotherapy, Psychodrama, and Sociometry, 33, 179-184.
- Fandt, P. M., Richardson, W. D., & Conner, H. M. (1990). The impact of goal setting on a team simulation experience. Simulation and Gaming, 21, 411-422.
- Gardenswartz, L., & Rowe, A. (1993). Managing diversity. New York: Irwin.
- Gordon, J. (1995). Different from what? Diversity as a performance issue. Training, 32(5), 25-33.
- Griggs, L. B., & Louw, L. (1995). Valuing diversity. New York: McGraw Hill.
- Janus, I. L. (1982). Groupthink. Boston: Houghton Mifflin.
- Kanter, R. M. (1977). Some effect of proportions on group life. American Journal of Sociology, 82, 965-990.
- Klein, H. J., & Mulvey, P. W. (1995). Two investigations of the relationships among group goals, goal commitment, cohesion, and performance. Organizational Behavior and Human Decision Processes, 61, 44-53.
- Knouse, S. B. (1996). Diversity, organizational factors, group effectiveness, and total quality. DEOMI Technical Report. Patrick AFB, FL, (RSP 96-6): Defense Equal Opportunity Management Institute.
- Knouse, S. B., & Chretien, D. (1996). Workforce diversity and TQM. In S. B. Knouse, (Ed.), Human resources management perspectives on TQM: Concepts and practices, (pp. 261-274). Milwaukee: American Society for Quality Control Press.
- Larkey, L. K. (1996). Toward a theory of communicative interactions in culturally diverse workgroups. Academy of Management Review, 21, 463-491.

- Levine, J. M., & Moreland, R. I. (1995). Group processes. In A. Tesser (Ed.), Advanced social psychology (pp. 419-466). New York: McGraw Hill.
- Milliken, F. J., & Martins, L. L. (1996). Search for common threads: Understanding the multiple effects of diversity in organizational groups. Academy of Management Review, 21, 402-433.
- Morrison, A. M. (1992). The new leaders: Guidelines on leadership diversity in America. San Francisco: Jossey Bass.
- Mullen, B., & Cooper, C. (1994). The relation between group cohesiveness and performance. Psychological Bulletin, 115, 210-227.
- Nemeth, C. J. (1986). Differential contributions of majority and minority influence. Psychological Review, 93, 23-32.
- Steiner, I. D. (1972). Group process and productivity. New York: Academic Press.
- Stone, D. L., & Colella, A. (1996). A model of factors affecting the treatment of disabled individuals in organizations. Academy of Management Review, 21, 352-406.
- Triandis, H. C. (1995). A theoretical framework for the study of diversity. In M. M. Chemers, S. Oskamp, & M. A. Costanzo (Eds.), *Diversity in organizations* (pp. 11-36). Thousand Oaks, CA: Sage.
- Watson, W. E., Kumar, K., & Michaelsen, L. K. (1993). Cultural diversity's impact on interaction process and performance: Comparing homogeneous and diverse task groups. *Academy of Management Journal*, 36, 590-602.
- Zaccaro, S. J. (1991). Nonequivalent associations between forms of cohesiveness and grouprelated outcomes. *Journal of Social Psychology*, 131, 387-399.
- Zaccaro, S. J. (1995). Task cohesion as a facilitator of team decision making under temporal urgency. *Military Psychology*, 7, 77-93.

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