MANAGING DIVERSITY AND
GLASS CEILING INITIATIVES AS
NATIONAL ECONOMIC IMPERATIVES

Working Paper #9410-01
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This report was funded under purchase order B9434717 for the U.S. Department of Labor Glass Ceiling Commission. Opinions stated in this document do not necessarily represent the official position or policy of the U.S. Department of Labor.
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EXECUTIVE SUMMARY

The workforce of the United States is among the most gender and racioethnically diverse in the world. This diversity presents both challenges and opportunities as organizations compete for advantage in a global marketplace. One of the most critical challenges posed by diversity in the workplace is to eliminate barriers to entry and success in middle and senior manager jobs which may be related to group identity factors such as gender and race (i.e. break "the glass ceiling"). We are convinced that a major obstacle to establishing managing diversity and glass ceiling initiatives as top priorities for industry and government is the failure to recognize that the capacity to manage diversity has major implications for the economic performance of organizations. Accordingly, the purpose of this monograph is to provide conceptual arguments and review research data on why increasing the capacity of organizations to manage diversity, including eliminating glass ceiling effects, is a national economic imperative.

Based on an extensive review of the literature, our own extensive consulting experience and input from five leading companies on organization change to manage diversity, we conclude that:

1. Managing diversity can improve cost structures of organizations and increase the quality of human resources.

2. Diversity in workgroups can be leveraged to increase marketing effectiveness, creativity, innovation, and problem solving.

3. Diversity requires managerial attention because differences among employees make supervision and work-coordination more complex and challenging.
For all of the above reasons we further conclude that:

4. Organizations which excel at leveraging diversity, (including the hiring and advancement of women and non-white men into senior management jobs, and providing a climate conducive to contributions from people of diverse backgrounds) will experience better financial performance in the long run than organizations which are not effective in managing diversity.

In order to facilitate the goal of leveraging diversity, the monograph provides a discussion of implications and recommendations for industry, for government and for academics charged with planning scholarly research. These recommendations are listed in abbreviated form below.

**Recommendations for Industry**

1. Ensure opportunities for assignments to the most challenging projects and job tasks are equally available to all qualified persons.

2. Change benefit and work schedules to be more flexible and to recognize differential needs of career oriented women and of parents of both genders.

3. Develop explicit plans to diffuse conflict and reduce participate stigma effects of affirmative action plans.

4. Assign jobs and committees to ensure cultural diversity of employees involved in developing marketing strategy.

5. Study cultural effects on consumer behavior and reflect learnings in marketing strategy.

6. Invest in on-going diversity-related education programs.
7. Identify elements in the organization culture and management systems which may contribute to unwanted turnover or lower productivity by members of under-represented groups, and then create action plans to address these elements.

8. Allow a long-term time horizon for achieving results and assessing progress.

9. Invest in measurement technology and form partnerships with academics and consultants to make advances in this technology.

10. Utilize 360 degree feedback as a tool to gather data related to effectiveness at the individual level.

11. Implement mechanisms (such as Monsanto's JOIN UP) to assist new employees with organizational entry and longer term employees with new supervisor/subordinate matches.

12. Establish accountability at both the organizational and individual level for follow-through on plans related to diversity, including the use of business plans on diversity and/or integration of diversity into existing formal strategic and operational planning.

**Recommendations for Government**

1. Increase funding of research with an emphasis on proposals addressing the most pressing needs (see recommendations for research below).

2. Increase recognition awards and increase the visibility of awards for exemplary work on managing diversity.
3. Create tax incentives for investing in programs which will increase utilization
   of our diverse labor pool (e.g. teacher intern programs).

4. Create a government executive/staff loan program to add resources into the
   private sector to be used to plan and implement organization change work on
   diversity.

5. Redirect compliance reviews to focus on broader measures of diversity
   climate and to focus more on ensuring that actual change is taking place in
   companies, rather than just identifying problems/shortcomings.

**Recommendations for Future Research**

Research is not keeping pace with practice in this area. There is a need for additional
research on a wide range of issues, but the following are among the most pressing:

1. Research which addresses how to avoid the potential performance losses
   related to diversity such as reduced communication, higher conflict, lower
   attraction to group membership, and higher turnover.

2. **Field** research comparing diverse teams to homogeneous teams on problem
   solving, creativity and marketing strategy using a variety of diversity
   dimensions. The contextual or process factors which impact on the
   relationship between diversity and group outcomes should also be examined.

3. Research which examines directly the relationship between performance on
   diversity-related goals and organizational performance measures like market
   share and productivity which are directly tied to financial results.
4. Research which examines the effectiveness of various intervention techniques related to diversity such as awareness training, mentoring programs, core groups, identity-related support groups, culture audit methods etc.

5. Research which seeks to validate measurements that are useful in the area of managing diversity.

If sustained attention is given to these recommendations in the coming years, we will make major strides toward meeting the challenge of the national economic imperative to manage diversity, and begin to realize the full potential of diversity as one our most powerful natural resources.
INTRODUCTION

The workforce of the United States is among the most gender and racioethnically diverse in the world. Examples of this diversity abound. For more than two decades, one fifth or more of our annual labor force growth has come from immigration. Women represent nearly half of the national workforce and are a majority of the workforce in several states. It is now projected that by the year 2050, the population of the U.S. will be evenly split between whites and non-whites.¹

Diversity in the U.S. workforce presents both challenges and opportunities to U.S. companies seeking a competitive advantage in an increasingly global marketplace. Unfortunately, most organizations have neither solved the problems of diversity nor leveraged its potential for competitive advantage. The major premise of this paper is that because the U.S. workforce is more diverse than that of many competitor nations, a poor job of managing diversity creates a competitive disadvantage, while effectively managing diversity offers a competitive edge.

Based on our extensive review of pertinent literature as well as our own research and consulting work, we conclude that a major reason that many public and private sector organizations fail to capitalize on one of our most promising assets is that the connection between effective management of diversity and organizational economic performance is poorly understood. We emphasize that although this is not the only reason, it is a prominent one. Accordingly, the purpose of this monograph is to provide conceptual arguments and review research data which link managing diversity efforts (including initiatives designed to break upward mobility barriers for women and non-white men) with organizational performance.

Workforce diversity is a broad topic covering many dimensions of personal identity around which inter-group dynamics occur. In addition to gender and race, other identities that have been noted in the literature include nationality, work function, sexual orientation, organization level, age, physical ability, religion, and socioeconomic class. The range of
activities which are properly included under the umbrella of managing diversity is equally broad. However, in keeping with the current points of emphasis of the Glass Ceiling Commission, this monograph will focus attention on the dimensions of gender and racioethnic diversity.

Following this introduction, the monograph is organized into three major segments. The first segment defines key terms and explains the relationship between managing diversity and glass ceiling initiatives. The second and largest segment provides conceptual arguments and research data linking managing diversity and glass ceiling initiatives to organizational performance. The final segment provides conclusions and implications of the arguments and research of part II for the future practice of management and for organizational scholarship.

METHODOLOGY

An extensive literature review was conducted for this monograph through The University of Michigan libraries. Two hundred and two search combinations were employed using key terms related to the managing of diversity and glass ceiling issues. The following data bases were searched for the years 1983-1993: (1) ABI inform (index of business and management journals) (2) The Online Catalog (all materials owned by the University of Michigan or the Center for Research Libraries) (3) Wilson Indexes to Journal Articles (includes the Business Periodicals Index, the General Studies Index and the Social Science Index) (4) PsycINFO (American Psychological Association Index containing references and abstracts for the international serial literature in psychology and related fields).

In addition to this search, the monograph makes extensive use of material from the authors' own previous publications and consulting experience, particularly the book *Cultural Diversity in Organizations* by Taylor Cox Jr. which provides the conceptual framework for the monograph. Finally, to assist in forming recommendations for practice, for future research and
for the Department of Labor, we contacted six leading industry experts on diversity (see endnote 77). We received five responses by our deadline and this information was integrated into the Conclusions and Implications section of the monograph.

THE RELATIONSHIP BETWEEN MANAGING DIVERSITY AND GLASS CEILING INITIATIVES: DEFINITIONS OF TERMS

The usage of terms such as diversity, managing diversity, valuing diversity and cultural diversity in the literature and practitioner language of organizations has exploded in recent years. Each of these terms is subject to a variety of interpretations and, in some cases, the distinctions between these interpretations are quite meaningful. For example, some managers we have talked to through the course of our consulting work use the term diversity to refer to members of minority groups while others use it to characterize the entire workforce. Obviously, these two perspectives have very different implications for designing research or organizational interventions around diversity.

Also, confusion abounds regarding the role of traditional topics of research and organizational development such as equal employment opportunity and affirmative action in the context of managing diversity efforts. It is therefore imperative that we define key terms before proceeding to the analytical sections of the monograph.

As a characteristic of the workforce we define diversity as:

The representation of people of different group identities in the same organizational social system.

A group identity is an affiliation that an individual has with a group which has identifiable features that distinguish it from other groups. When these group identities represent people with different cultural systems then the term cultural diversity applies. By cultural
system we mean a system of values, behavioral norms, goal priorities and preferred work styles which distinguish one group from another. Ten of the most common group affiliations including gender and race were identified in the introduction to this paper. Rabbie & Horwitz have argued that in discussing group affiliations it is necessary to distinguish between social categories and social groups. They reason that the latter assumes that relations are embedded in a social system, whereas the former assumes only the existence of a group of people who share at least one trait in common.³ We believe that group identities are only meaningful in the context of multiple social categories (i.e. a social system). Therefore our definition of diversity subsumes both the characteristics of social categories and social groups.

Another definitional distinction which has been raised by some is that group identity is determined by how people define themselves as opposed to how they are defined by others. By this logic, a white male who does not consciously identify being white and/or male as important parts of his self concept would not have a group identity on gender and race. We think that this distinction undervalues the importance of how other people define us. Thus the fact that the person in our example does not think of himself as a white male does not mean that his life experiences will not be determined (in part) by these group affiliations. Our definition therefore assumes that group identities derive from both self perceptions and the perceptions of others.

It is important to acknowledge the distinction between the more obstensive identification with a group that derives from physical or labeling information and the potentially more powerful identification that comes from embracing the cultural norms and values of the group. For example, we might respond to the suggestions of an individual in a meeting partly because she works in the accounting department (bean counters don't see the big picture, etc.) or because she is female, even though she may not identify with the culture of accounting or of women, and these group affiliations may not be important in her own self-definition. One way to distinguish these is to refer to physical-category type of identity as phenotype and the personal acceptance of the group's norms or values as cultural identity.⁴ In including both forms of group affiliation in defining group identity, we chose to emphasize the overall impact of identity on interpersonal
relations more so than its source (self versus others).

A diverse workforce is therefore one in which the group identities of people vary. Clearly by this definition all workforces are diverse on some level, but equally clear is that some are more diverse than others. It is also true that some identities have more influence on behavior and experiences in organizations than others. One illustration of this is that in a recent research project for a financial services firm, one of the authors obtained 200 measures of work experiences including a mixture of perceptual measures and historical data from the human resource files. Experiences differed significantly for the respondents based on a variety of group identities as shown below.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Table 1</strong></td>
<td>Percent of Measures Which Varied Significantly by Group Identity</td>
</tr>
<tr>
<td>Race</td>
<td>78%</td>
</tr>
<tr>
<td>Organization Level</td>
<td>56%</td>
</tr>
<tr>
<td>Department</td>
<td>46%</td>
</tr>
<tr>
<td>Gender</td>
<td>41%</td>
</tr>
<tr>
<td>Age</td>
<td>27%</td>
</tr>
</tbody>
</table>

By this measure of intensity, race had the most intense effects on work experiences in this organization among the five identities reported. It should be noted however, that while race
had the broadest scope of effects here, organizations vary in which group identities surface as differentiating experiences more than others.

Managing Diversity

By managing diversity we mean "proactive attention and efforts of managers and other employees to respond effectively to the challenges posed by diversity in workgroups."

The goals of managing diversity are:

1. create a climate in which all members can realize their full potential of organizational contribution and personal achievement.

2. capitalize on the potential benefits of diversity while minimizing the potential barriers to effectiveness posed by diversity.

3. create a climate in which people with fundamental differences in culture (values, preferred work styles, goal priorities and behavioral norms) can work together with maximum effectiveness.

As shown in Figure 1 the phrase "proactive attention and efforts" includes a broad scope of activities.
Figure 1
Spheres of Activity in Managing Diversity

ORGANIZATION CULTURE
- valuing differences
- prevailing value system
- cultural inclusion

MANAGEMENT OF CULTURAL DIVERSITY
- promoting knowledge and acceptance
- taking advantage of the opportunities that diversity provides

HR MANAGEMENT SYSTEMS (BIAS FREE)
- recruitment
- training and development
- performance appraisal
- compensation and benefits
- promotion

HIGHER CAREER INVOLVEMENT OF WOMEN
- dual career couples
- sexism & sexual harassment
- work-family conflict

EDUCATION PROGRAMS
- improve public schools
- educate management on valuing differences

ESTABLISHING ACCOUNTABILITY AND MEASUREMENT SYSTEMS
- effect on cohesiveness, communication, conflict, morals
- effects of group identity on interactions and stereotyping
- prejudice (racism, ethnocentrism)

Source: Adapted from Exhibit 1 of Managing Diversity; Implications for Organizational Competitiveness, by Taylor Cox and Stacy Blake. The Executive, Vol 5, 1991,
Glass Ceiling Initiatives

As a description of organizational experience, the "glass ceiling" has been defined as a set of invisible barriers which block or restrict the entry of members of non-majority groups into senior management positions. In the context of this monograph, glass ceiling initiatives will therefore be defined as organizational actions to hire, retain and promote members of gender and/or racioethnic minority groups into higher level management jobs in organizations. This definition makes it clear that glass ceiling initiatives represent an important component of managing diversity. The relationship between managing diversity and glass ceiling initiatives might be further clarified by discussion of the terms equal employment opportunity and affirmative action.

In theory, the phrase equal employment opportunity expresses a goal which is essentially item 1 in the list of goals of managing diversity provided above (namely ensuring an organizational climate and culture in which all members can contribute and achieve to their full potential). In practice, equal employment opportunity is commonly thought of as adherence to the provisions of a series of civil rights laws which outlaw discrimination in employment on the basis of gender, race, national origin, pregnancy, physical ability, age, and veterans status. Technically the law covers all forms of discrimination by including the statement "and other conditions of employment." However, prior to the work of the Glass Ceiling Commission in just the past few years, equal employment opportunity law was widely interpreted to be limited to hiring, promotion and, in rare cases, compensation. Thus unfortunately for many people, equal employment opportunity has a very restricted, legalistic meaning.

In theory affirmative action refers to all steps taken by organizations to promote the goal of equal employment opportunity. In practice however, affirmative action in the minds of many has become synonymous with hiring and promotion quotas or required selection of women and non-white men in predominately white-male organizations. These distinctions of meaning between theory and practice for equal employment opportunity and affirmative action have
enormously important implications for specifying relationships between managing diversity work and glass ceiling initiatives. Under the somewhat narrow connotation of equal employment opportunity and affirmative action as applied in the past, a number of important differences between EEO/AA and managing diversity can be specified as noted in Table 2.

| DIFFERENCES BETWEEN MANAGING DIVERSITY AND TRADITIONAL PRACTICES OF EQUAL OPPORTUNITY/AFFIRMATIVE ACTION |
|-------------------------------------------------|-------------|-------------|
| Emphasizes post-selection treatment issues such as ability to realize one's full potential | EEO      | MVD    |
| Recognizes and emphasizes the impact of culture differences among groups on employee experiences | no      | yes    |
| Recognizes the need for organization change and change among members of the dominant culture group | no      | yes    |
| Emphasizes business economic reasons for having and managing diversity | no      | yes    |
| Approaches diversity as an opportunity more so than a problem to be solved | no      | yes    |
| Acknowledges a broad range of group identities and effects on employment | no      | yes    |

It is our view that affirmative action efforts are a sub-set of managing diversity activity and that glass ceiling initiatives represent a sub-set of affirmative action activity. In expressing the relationships among these terms in this way we advocate a broader connotation of affirmative action than some have applied. Likewise, glass ceiling initiatives represent a variety of steps taken by organizations toward successful participation of members of socio-cultural minority groups in the power positions of organizations. In suggesting that glass ceiling initiatives have a somewhat narrower focus than managing diversity we do not intend to reduce
or minimize their importance. On the contrary, to the extent that glass ceiling initiatives focus attention on successful participation of members of socio-cultural minority groups in the leadership structure of organizations, they address what many believe is the single most critical element of managing diversity. Thus a major premise of this paper is that glass ceiling initiatives, as a central sub-set of work devoted to the management of diversity, have important implications for the economic performance of organizations. In addition to the legal and moral motives, we argue that for many organizations there is an economic performance rationale for investing in glass ceiling initiatives. These rationales will be developed with some supporting research in part II of the paper.

One final distinction that deserves attention in this segment is our view that a proper understanding of the glass ceiling requires analysis of the power content and upward mobility potential of positions at the same organization level as well as analysis across levels. Several examples will be given to clarify this point.

One reason that it is important to analyze the quality of assignments at a given organization level is because members of gender/race minority groups are often segregated in occupations and work functions with lower hierarchical ceilings and less organizational power. For example, research by Sharon Collins on high-level blacks in predominately white organizations revealed that two-thirds were in jobs that dealt directly with equal opportunity-related issues and sixty percent held jobs in just two departments (human resources or urban affairs). She further reports that at least half of the black professionals working in these areas were career-pathed into them from other, higher visibility areas in the organization. Collins notes that because senior managers in organizations have historically been drawn from career paths such as marketing, finance and operations, the tendency for non-whites to be placed in areas such as human resources and urban affairs, is a limiting factor on their upward mobility.

A second example of why job type as well as job level must be considered in assessing the glass ceiling is that jobs differ widely in the extent to which they provide control over resources such as people and finances. For example, in a recent project in which one of the
authors studied promotion processes for advancement to senior management in a large public sector organization, we found that at some job levels the proportion of men who supervised people was substantially higher than the proportion of women (e.g., 78 percent for men compared to 63 percent for women at one of the levels from which senior managers were selected.)

**LINKAGE OF MANAGING DIVERSITY TO ENHANCED ORGANIZATIONAL PERFORMANCE: CONCEPTUAL FRAMEWORK**

In this section of the paper (part II) we will develop the conceptual arguments and review relevant empirical support for the premise that managing diversity is an organizational economic performance issue. In doing so, we will particularly emphasize the role of glass ceiling initiatives.

We begin by presenting a conceptual model which explains the logic of the relationships and then we discuss, in individual segments, the empirical evidence bearing on each of the main arguments.

Figure 2 is a graphic representation of our conceptual model illustrating the link between the management of diversity and organizational performance.
Figure 2

Linkage of Managing Diversity and Organizational Effectiveness: A Conceptual Framework

Diversity Climate
- Workforce Demographics
- Stereotypes
- Cultural Differences
- Ethnocentrism
- Inter-Group Conflict
- Prejudice/Harassment
- Institutionalized Bias in Management Practices

Individual Outcomes
Affective
- Satisfaction
- Commitment
- Involvement
Achievement/Contribution
- Performance
- Promotion
- Compensation

Organizational Effectiveness

First-Level
1. Turnover
2. Work Quality/Productivity
3. Communications
4. Marketing Strategy
5. Problem Solving
6. Creativity/Innovation
7. Meeting EEO Goals

Second Level
1. Profit
2. Market Share
3. Achievement of Public Sector Goals

Adapted with permission from Figure 1 of *Cultural Diversity in Organizations*, by Taylor Cox, Jr., Berrett-Koehler Publishing, San Francisco, 1993
The model will be explained in general terms here and then in more detail in the sections that follow.

**Diversity Climate**

Organizations consist of a variety of social-psychological conditions and phenomena which collectively define the "diversity climate." Among the most important of these are: (1) workforce demographic profile; (2) the extent of outgroup stereotyping; (3) cultural differences; (4) ethnocentric behavior especially by the in-group of power; (5) the degree of inter-group conflict; (6) the extent of prejudice and of harassment behavior; and (7) the extent to which bias relevant to the group identities of members has become institutionalized. Each of these will be briefly defined.

The workforce demographic profile refers to the distribution of group identities across different levels of the organization. The most common examples are gender and racioethnic distribution, although we believe it is also relevant to include other identities such as age and work department. The two primary measures of interest here are overall representation of the different groups and representation at various levels of management. The importance of this dimension of the model is well established in the research on group composition, tokenism, minority-group density, and the glass ceiling. Stereotyping is a process in which characteristics are ascribed to individuals on the basis of their assumed membership in a group to which the characteristic is thought to apply. Stereotyping of outgroup members (i.e. members of identity groups other than our own) is a pervasive behavior in organizations and is often cited as a leading cause of the glass ceiling. For example, based on data on the career problems encountered by women in 245 U.S. organizations, Rosen, Miguel & Pierce report that a majority (55%) of managers cited gender stereotypes as a major employment obstacle for women at their companies.
Link of Diversity Climate to Organization Effectiveness

The basic logic of the model in Figure 2 is that the existence of diversity in workgroups on dimensions such as gender race, nationality, work function, and so on, interacts with the organizational climate for diversity to influence (either directly or indirectly) a variety of organizational outcomes ranging from communications to profit. Referring to Figure 2, the arrow between workforce demographics and the first-level organization effectiveness measures recognizes that the presence of diversity presents certain challenges to management if workgroups are to function with maximum effectiveness. Unless the effects of diversity are well managed, turnover, miscommunication, and interpersonal conflict may increase leading to lower productivity and ultimately lower performance on profit, market share or other strategic goals. At the same time, the presence of diversity offers opportunities to enhance marketing strategies, problem solving quality, creativity, and innovation, all of which should ultimately have a positive impact on strategic goals. A third effect of diversity demographics is that many organizations have equal opportunity of employment objectives which are met or missed based directly on performance on hiring and glass ceiling initiatives. It is important to note that glass ceiling initiatives indirectly influence the full range of organizational effectiveness measures listed. For example, turnover of women in male-dominated organizations is often traced to frustration over career stagnation, and the ability to tap the problem-solving potential of diversity is partly dependent on the promotion and utilization of women into ranks of the firm that were previously nearly all male.

According to the model in Figure 2, many of the effects of diversity on organization performance occur indirectly and are determined by the climate for diversity. As indicated previously, major aspects of the climate for diversity are: the extent to which members of identity groups are stereotyped; the degree of cultural difference among members and between members and the culture of the organization; the extent to which ethnocentric behavior occurs (favoritism of in-group members and disfavor of out-group members); the amount of inter-group
conflict; the amount of identity related prejudice (e.g., racism and sexism); and the extent to which biases favoring persons of certain group identities have become institutionalized in the policies and practices of the organization. Collectively these factors determine the extent to which being a member of a minority group will create barriers to contribution for employees. When such barriers are severe, both the emotional and the personal achievement outcomes of employees are reduced. These effects, in turn, lead to higher turnover, poorer communications, and productivity losses. In addition, the potential benefits of diversity in better marketing, problem solving and creativity are lost because the climate and culture of the organization are not conducive to full participation by all organization members. Here it is important to acknowledge that members of the majority group can also be affected by diversity. When they react negatively to the presence of diversity or to efforts to manage it, this becomes a detriment to organizational performance. Thus managing diversity requires attention to the effects of diversity on all workers. Regarding glass ceiling initiatives, it should be acknowledged that attention to the effect of these efforts on the emotional and career achievement outcomes of white men must be an integral part of the work. Otherwise, the overall organizational results obtained from managing diversity and glass ceiling efforts may not improve.

Finally, the model in Figure 2 posits that first-level organizational performance measures such as turnover, productivity, the quality of marketing strategy and the level of innovation and creativity ultimately determine the "bottom line" measures of profits, market share and achievement of non-profit sector strategic goals.

Because the impact of diversity is expressed in the model as an interaction (or joint effect) of the identities of employees and the climate for diversity, the model in Figure 2 has been labeled by Cox as the Interactional Model of Cultural Diversity (IMCD).10
REVIEW OF THEORY AND EMPIRICAL RESEARCH

Although the logic of the IMCD framework in itself should provide substantial motivation for investment in organization change to create a positive diversity climate, there is clearly a need for empirical evidence of the relationships discussed above. This segment of the paper will review empirical research which is either directly or indirectly relevant to the relationships illustrated in Figure 2. We want to emphasize at the outset that an exhaustive discussion of pertinent literature is not possible here, rather we intend to cite exemplary theory and research relevant to each sub-topic.

Effects Related to Minority-Group Disadvantage

There is research evidence to support the conclusion that affective and achievement outcomes of individuals are influenced by various aspects of diversity climate. Much of this research shows that members of minority groups, based on such dimensions as gender, racioethnicity, and age, often have lower emotional and achievement outcomes than members of the corresponding demographic majority group. For example, in a recent study of compensation among 503 MBAs of various industries, Cox and Harquail found that female MBAs earned less than male MBAs from the same business school even after controlling for seniority, industry, job performance, and other factors which determine salaries.\textsuperscript{11} Other researchers have found similar results.\textsuperscript{12}

A second example is research on the early career experiences of 729 Black and White MBAs in which both gender and racioethnicity affected job involvement levels of the employees. Black MBAs had significantly lower job involvement than Whites and women had significantly lower job involvement than men.\textsuperscript{13} Job involvement is defined as the extent of psychological identification with one’s work.\textsuperscript{14} It is closely associated with job motivation and has specifically been shown to predict expected or actual turnover.\textsuperscript{15} Thus this research directly links affective career outcomes at the individual level to the organizational outcome of employee
turnover.

Research on glass ceiling effects is pertinent here in that it establishes that personal achievement as measured by vertical advancement is related to identity groups such as gender, racioethnicity and age in many organizations.16 The evidence of under-representation of women and non-white men in U.S. organizations is ubiquitous. Cox cites the following examples in his recent book, Cultural Diversity in Organizations:17

1. less than 10 percent of the largest private employers have a woman on the board of directors.

2. of the 4000 highest paid officers and directors of the largest 100 U.S. companies in 1990, less than one half of one percent were women.

3. of the 72 directors of regional Federal Reserve Banks in 1990, there were only 3 women and 2 non-whites.

Additional evidence cited in a recent article by former Director of the Office of Federal Contract Compliance, Cari Dominguez, indicates that women and non-white men (who represent more than 60 percent of the workforce) hold only about 5 percent of senior management jobs and the increase in representation of these groups in top executive jobs during the 1980s was only about 2 percent.18

It should be noted that under-representation in itself does not necessarily signify lower opportunity for advancement since a variety of other factors could account for it. However, there is some evidence from studies in which many of the alternatives to identity bias were controlled, which suggests that promotion probabilities are indeed influenced by group identities. For example, data from the Quality of Employment Panel on career measures of men and women revealed that women were held to higher promotion standards than men and received fewer promotions than men with equal measured abilities.19 Likewise, in a survey study of 692 managers in a large Canadian company, gender had a significant effect on chances
for promotion even after career-relevant factors such as formal education and childhood socialization were controlled.\textsuperscript{20}

On racial/ethnic identity, Greenhaus, Parasuraman & Wormely studied managerial personnel in three large U.S. companies and found that Blacks had lower promotability ratings and were more likely to be plateaued (more than 7 years in the current job) than their White counterparts.\textsuperscript{21} Such results are not universally observed however. For example, in a study of 125 lower level managers in a public sector firm, Cox and Nkomo found no significant effects of race on promotability ratings, and Lewis found no gender effects on promotion chances in a study of federal government workers.\textsuperscript{22}

Research comparing compensation of men and women with similar backgrounds suggests that hierarchical levels and compensation obtained by members of minority groups may be lower than those of majority-group members with similar seniority because of differences in starting points. The importance of entry level to subsequent career success has been highlighted by classic studies in career development such as those of Douglas Hall and Edgar Schein.\textsuperscript{23} More recent empirical research tends to further validate their views. For example, in their study of career experiences of 502 MBAs from the same elite business school, Cox & Harquail found that the organizational level (measured as zero for non-management entry level, one for first level of management and so on) and salary at which male graduates started their post MBA careers were significantly higher than that of female graduates.\textsuperscript{24} Similarly, Olson, Frieze & Good's study of 1297 MBAs from the same university not only found that women had lower starting salaries than men, but also that gender differences in current salary were not significant once differences in starting salary were controlled.\textsuperscript{25} Thus when evaluating glass ceiling effects, managers and researchers must give attention to the possibility of group identity effects on entry level.

\textbf{Diversity of Group Composition Effects}

Earlier it was noted that the effects of group identity on career experience are relevant for
all employees, not just members of minority groups. One reason is that any disadvantage for persons of certain racioethnic or gender groups is also an advantage for persons of other gender and racioethnic groups. A second reason is that if the first priority of employees is the achievement of organizational goals, any obstacle to that for any employee should be viewed as a problem for all employees. Still a third reason why managing diversity and glass ceiling work has implications for all employees is that some theory and research suggests that diversity (at least in its typical unmanaged form) may lead to lower workgroup cohesiveness, motivation, and morale, especially for majority-group members.

**Theoretical Work.** Although diversity in workgroups holds strong potential performance advantages, it is also clear that diversity in workgroups presents some potential obstacles to performance in organizations. A major reason for this is that people often have higher attraction and feel more comfortable and satisfied with workgroup members who are like themselves. These more positive feelings of loyalty and attraction to the group are often referred to as "group cohesiveness." In general, cohesiveness is easier to achieve in homogeneous groups. Ziller outlines three theoretical explanations of the effects of diversity on groups which are related to cohesiveness.26 One theory holds that members of groups emphasize status congruence among members. When members differ on many characteristics such as often occurs in heterogeneous groups, opportunities for status incongruent increase. For example, a woman who is also team leader may present status incongruity for some persons who are accustomed to being supervised by men. Thus, diversity in groups may lead to lower cohesiveness due to status incongruent.

A second theory is that perceived similarity increases attraction which in turn enhances cohesiveness. Therefore, homogeneity reinforces the closeness of groups. In this regard, it should be noted that demographic similarity on dimensions such as gender and nationality do not necessarily indicate attitudinal or behavioral similarity. Nevertheless, research has shown that both demographic and attitudinal similarity influence attraction.27

A third theoretical perspective on the effects of heterogeneity on cohesiveness in groups
is social comparison theory. This theory holds that people tend to seek homogeneity in groups or to create it, through pressures for conformity, in order to facilitate social comparisons which they rely on to conduct self evaluations. Since such comparisons are more reliable when the comparison person is viewed as similar (i.e. all other things equal), diversity may be avoided because it makes valid social comparisons more difficult.

Research has shown that cohesiveness in workgroups is closely tied to other outcomes contained in the Figure 2 model including member morale and communications. Thus, there is reason to expect that diversity, at least when unmanaged, potentially lowers member morale and makes communications more difficult.

It should be emphasized, however, that research has not shown that cohesiveness improves the work performance of groups. A large-scale study of the relationship between cohesiveness and productivity of groups revealed that highly cohesive groups are equally likely to have lower and higher productivity compared to less cohesive groups.

In summary, there is reason to believe that the presence of cultural diversity does make certain aspects of group functioning more problematic. Misunderstandings may increase, conflict and anxiety may rise, and members may feel less comfortable with membership in the group. These effects may combine to make decision making more difficult and time consuming. In certain respects then, culturally diverse workgroups are more difficult to manage effectively than culturally homogeneous workgroups. In view of this, the challenge for organizations, as suggested in our definition of managing diversity, is to manage in such a way as to maximize the potential benefits of diversity while minimizing the potential disadvantages.

Empirical Research. In one of the early empirical studies which is relevant to diversity effects on the functioning of workgroups, Fiedler studied the effects of cultural diversity on group performance using Dutch and Belgian participants. He found that the heterogeneous groups reported a "less pleasant atmosphere," higher anxiety, and "had obvious communication problems." Despite these difficulties however, he found that the diverse groups performed equally well with the homogeneous groups on the assigned tasks. It should be noted that
Fiedler's data does not address the possibility of performance declines if the communications and morale-related problems persist over an extended period of time.

Similar conclusions are suggested by a study of the effects of gender diversity on the employment satisfaction of men. Using data on 822 male employees from the 1973 Quality of Employment Survey, Wharton & Baron found that men in gender-mixed work settings reported lower job satisfaction, lower self esteem and more job-related depression than men in either male- or female-dominated work settings. They note that their results underscore that simply achieving numerical balance in employee groups without addressing the quality of cross-gender interaction could have negative effects for both men and women.\(^{31}\)

More recently, Tsui, Egan & O'Reilly studied a sample of 1705 people organized into 151 groups across three large organizations. They were interested in testing the effect of level of group diversity on levels of psychological and behavioral attachment of people to their employers. Their findings (framed as separate comparisons for gender and racioethnicity) indicated that men associated increasing gender diversity with lower levels of psychological attachment, increased absence, and lower intent to stay in the organization. These differences did not occur for women. Likewise, they found that Whites associated increasing racial diversity in the work unit with lower psychological attachment, increased absence, and lower intent to stay. By contrast, being different in race from others in the work unit had no effect on the outcome measures for non-whites. The authors conclude that the research calls into question the "fundamental assumption" that the effect of diversity is always felt by minority group members.\(^{32}\)

One of the many possible interpretations and implications of this research is that members of the majority group (more so than minority-group members) need help to achieve comfort levels in working with people who are demographically different. This is a major motive behind organization change and development interventions to improve the "diversity competency" of organizations. As suggested earlier, negative effects on the individual affective outcomes of employees of any identity has a potential impact on organization performance.
More than anything else, this research reinforces the message that simply increasing the level of diversity in a workgroup without attention to the diversity climate factors of Figure 2, may lead to lower organization performance than was possible when the workforce was less diverse.

**Employee Turnover and Absenteeism Effects**

*Conceptual Argument.* One of the ways that the work outcomes of individuals (measured as affective and personal opportunity to contribute and achieve) get translated into economic impact is through employee turnover. Although some turnover of people is both desirable and inevitable, organizations would ordinarily want to avoid turnover which is directly related to group identity differences. As previously shown, morale and satisfaction may suffer when diversity and its effects are not well managed and a consequence of this is often increased turnover and absenteeism.

*Empirical Research.* Data from the U.S. workforce indicates that turnover and absenteeism are often higher among women and racioethnic minorities than they are for White males. One study found that the overall turnover rate for Blacks in the U.S. workforce is 40 percent higher than the rate for Whites. Corning Glass recently reported that during the period 1980-87, turnover among women in professional jobs was double that of men, and the rates for Blacks were 2.5 times those of Whites.\(^\text{33}\)

Consider the implications of these differences in turnover and absence rates for the cost structure of a hypothetical firm of 10,000 employees which has the national profile of racioethnic and gender demographics which is projected for the U.S. workforce in the year 2000. This means we assume that 62 percent of the workforce is composed of women or non-white men. Let us assume further that the turnover rate for White men is 5 percent and that the turnover rate for White women and non-whites is double the rate for White men. Based on this scenario, the difference in turnover rates would produce an additional 310 losses annually. Formulas for calculating the costs of turnover suggest that a conservative figure for replacement
costs for each loss would be $15,000.\textsuperscript{34} Therefore the annual cost of the turnover differential is estimated at 4.65 million dollars.

As a second example, assume that the same hypothetical organization has an average of $40,000 invested annually in salary and benefits per employee ($151 per day based on 264 working days per year). Based on the research presented in the previous section by Tsui et al., we predict that by the year 2000 each white male employee will have one additional day of absence per year due to the increase in unmanaged diversity occurring in their work groups. This increase in absence represents a cost of nearly $600,000 per year for our hypothetical firm.

Based on this analysis, our hypothetical organization could potentially cut costs by 2.62 million dollars per year if even half of the turnover and absence related to identity differences in workgroups could be eliminated by better management.

In one of the few published accounts of the dollar cost of identity-group bias in organizations, the annual after-tax losses due to gender bias for a company of around 27,000 employees was estimated at $22 million or one percent of total operating expenses.\textsuperscript{35} These costs included turnover, absenteeism, and lost productivity and addressed systemic bias, as well as losses related to sexual harassment. It is noteworthy that this study, based on a detailed audit of a Fortune 500 utility company by a New Jersey-based consulting firm, addressed only one dimension of diversity, gender.

In addition to cost factors associated with turnover and absenteeism, a poor diversity climate sometimes leads to lawsuits. A recent example is the glass ceiling case against Texaco in which a single women who was repeatedly passed over for promotion, was awarded a judgment of more than $20 million dollars.\textsuperscript{36} Although creating a positive diversity climate does require a substantial financial investment, this case is another example of how the cost of inaction can be very significant in financial as well as human terms.
Communication

**Conceptual Argument.** Although not as easily tied to specific dollar costs as turnover, absenteeism, or lawsuits, communications difficulties related to diversity may also lead to higher organizational cost structures. Cultural differences often include differences in language which can impede communications. In addition, communications flow more easily when trust is high and people are psychologically comfortable, yet both trust and psychological comfort may be harder to achieve in diverse groups.

**Empirical Research.** In a comparison of male and female problem solving groups, Mathews found that men and women performed better under different types of participation norms. Men performed best in open-structured situations in which anyone could speak at any time, while women performed best under a forced-structure environment in which participation was by turn-taking. The authors concluded that results may have been due to differences in culture. Men performed best in situations with norms that favored the more masculine characteristics of aggressiveness and impulsivity while women performed best when norms favored cooperative listening. Mathews concludes that gender diversity in groups presents the most potential to perform group tasks, but also poses greater chance for process losses unless group processes are developed which acknowledge the differences in preferred participation styles and make the most of both styles. Another example of the potential complications to communications posed by diversity in task groups was cited earlier. Fiedler found that there were some communication losses in the diverse groups compared to the groups that were homogeneous on nationality and ethnicity (see endnote 30).
Marketing Strategy

Conceptual Argument. Just as the workforces of organizations are becoming more culturally diverse so are their markets. In the U.S. for example, Asians, Blacks, and Hispanics now collectively represent nearly $500 billion annually in consumer spending. The Asian segment of the population is growing at a rate that is 10 times that of the overall population. Moreover, research on consumer behavior has consistently shown that sociocultural identities do affect buying behavior. While much of the research on cross-cultural differences in consumer behavior has focused on cross-national comparisons, it should be acknowledged that continued high rates of immigration in much of the world makes this research highly relevant to domestic marketing as well as exporting. In the U.S., for example, immigration is presently occurring at the rate of more than a million people per year and thus cultural differences based on nationality are highly relevant for planning successful domestic marketing strategy.

It should also be noted that the effects of cultural identity on consumer behavior are not limited to nationality identity. For example, it has been shown that consumer behavior of Hispanic Americans is influenced by the strength of identification with their ethnic group.

In view of the effects of culture on consumer behavior, selling goods and services in the increasingly diverse marketplace should be facilitated by a well-utilized, diverse workforce in several ways. First, there is the public relations value associated with being identified as managing diversity well. Just as people, especially those who appreciate the diversity of our population as a personal value may prefer to work for an employer recognized for valuing diversity, they may also prefer to buy from such organizations.

Second, firms may gain competitive advantage from the insights of employees from various cultural backgrounds who can assist organizations in understanding culture effects on buying decisions and in mapping strategies to respond to them.

Third, sales may benefit if consumers have some opportunities to interact with organizational representatives of their own identity groups. This does not mean that
organizations should seek to match the demographic identities of salespersons to customers on a consistent basis, but rather that it may facilitate sales if customers see that persons of their identity are included in the sales and customer service force of the organization, and have at least occasional opportunities to participate in matched identity transactions.

**Empirical Research.** Case examples of the potential for diversity to be leveraged to enhance the marketing performance of organizations are beginning to surface in the literature. One such example comes from the insurance industry in which two organizations recently cited for peak financial performance have explicitly employed diversity-related strategies and acknowledge them as central to their success. The Suquet Insurance Agency, a three-time winner of Equitable's agency award for overall effectiveness and profitability, has more than a dozen different nationalities represented in its salesforce. Managers Jose Suquet and Alfredo Cepero cite the agents' understanding of the market's idiosyncrasies, unique needs, sensitivity to customs, jargon and motivation as a part of their competitive advantage. They also note that "people with similar frames of mind, similar values and principles have a strong basis for communication, and communication is the art of sales."\(^{40}\)

Another example from the insurance industry is the Forest Hills, New York office of MONY. The office is among the top 10 producers of MONY Financial Services and attributes some of this success to their excellence in sales to the ethnic communities that they serve. The manager, Ashok Pradhan, himself an immigrant, cites drawing on his own experience to hire and train a salesforce that understood the concerns of the Asian-Indian community in which the office has significant sales.\(^{41}\)

Explicit recognition of cultural differences within the U.S. market is also paying off in the automobile industry. One example is Miami Toyota dealer Richard Goldberg whose philosophy is recorded in a recent article:

"What minority consumers respond to most eagerly is a level of respect that too often is missing in their transactions with mainstream businesses."
Targeted advertising, bilingual salespeople and special events all help to break down barriers.\textsuperscript{42}

The success of integrating cultural awareness into his marketing strategy is indicated by the fact that in 1987 his dealership had more than 50 percent of the Hispanic market in Miami, and sales increased by 400 percent over a six-year period.

A similar example is Ron Greenspan's Volkswagen dealership in San Francisco which has used cultural sensitivity training to build market share. Among other things, salespeople learned the emphasis that persons of Chinese descent place on family elders who often are the ultimate decision makers for major purchases. Sales to Asians was instrumental in a five-fold increase in overall sales per month. This type of diversity-leveraging to improve marketing is reported by a variety of other organizations in a variety of industries ranging from local grocery stores to newspapers and cosmetics.\textsuperscript{43} Stroh Breweries has developed a minority affairs council (MAC) which assists the company in translating issues of concern to non-whites into actionable items for the company. This is part of a deliberate strategy to enhance the image of Stroh with Black and Hispanic consumers which the company believes will pay off in increased market share.\textsuperscript{44}

**Creativity**

**Conceptual Argument.** Numerous writers have discussed a rationale for expecting creativity and innovation to be higher in diverse workgroups compared to homogeneous workgroups. In her treatise on innovation in organizations, Kanter notes that the most innovative companies deliberately establish heterogeneous teams in order to "create a marketplace of ideas, recognizing that a multiplicity of points of view need to be brought to bear on a problem" (p.167).\textsuperscript{45} Other innovation gurus have also cited diversity as a key ingredient in creativity. For example, in his book on innovation and change, Gareth Morgan cites a "law" which states that for a system to adapt successfully to its external environment, it must incorporate all of the variety found in that environment. He further states that "creativity thrives on diversity."\textsuperscript{46}
Empirical Research. There is considerable empirical research which supports the conclusion that creativity and innovation in workgroups is potentially enhanced by member diversity. In her study of high and low innovation companies, Kanter noted that companies high on innovation had done a better job than most on eradicating racism, sexism and classism, and tended to employ more women and racioethnic minorities than less innovative companies (see endnote 45).

Research conducted in educational institutions shows that the tolerance of diversity, defined as judging relatively few behaviors as deviant from norms, is a defining characteristic of innovative organizations.47

A series of studies by Charlene Nemeth show that minority views can stimulate consideration of non-obvious alternatives in task groups. In her experiments, participants were asked to form as many words as possible from a string of 10 letters. Individual approaches to the task were determined and then groups formed that were either majority (all members subscribed to the strategy for forming letters advocated by the majority of participants) or minority (non-majority individuals were present in the groups). Nemeth found that the "minority" groups adopted multiple strategies and identified more solutions than the "majority" groups. She concluded that the groups exposed to minority views were more creative than the more homogeneous, majority groups. She further concluded that persistent exposure to minority viewpoints stimulates creative thought processes.48

In another series of experiments, Harry Triandis and his colleagues tested the effects of diversity on creativity. The creativity of teams that were homogeneous on a series of attitude measures were compared against teams with heterogeneity of attitudes. The creativity of problem solutions was judged on originality and practicality. Results indicated that as long as the team members had similar ability levels, the heterogeneous teams were more creative than the homogeneous ones.49

Still another study examined the relationship between the social composition of top management groups and innovation in the banking industry. Based on data from 199 banks, the
authors concluded that both diversity of education and diversity of work function were positively correlated with measures of innovation when other factors such as organization size, team size, and location of operations were held constant. Diversity of age and tenure were not significantly correlated with innovation when the control factors were held constant.\footnote{50}

The limited amount of research comparing the creative performance of diverse groups to that of homogeneous groups has rarely defined group diversity along the specific dimensions of gender, nationality, and racioethnic identity, which have been the points of emphasis in this monograph. However, in a recent study of ethnic diversity and creativity, the quantity and quality of ideas generated on a brainstorming task from diverse groups of Asians, Blacks, Anglos, and Hispanics were compared to the ideas generated by homogeneous groups of Anglos. No significant differences were found in the quantity of ideas, but the ideas produced by the ethnically diverse groups were rated an average of 11 percent higher than those of the homogeneous groups on both feasibility and overall effectiveness.\footnote{51}

A few studies have not found creativity to be higher in diverse groups. For example, Thornburg compared performance on three 'unusual uses tasks' for diverse and homogeneous groups of college students. His definition of diversity included scores on the Clark-Trow Typology of College Students test, student occupational interests and student's academic major. His results were that the diverse groups only had significantly higher performance on one of four task conditions. On the other three task conditions there were no significant differences in performance between diverse and homogeneous groups. He attributed the results to possible losses of the benefits of diversity in the process of the groups.\footnote{52}

\section*{Problem Solving}

\textbf{Conceptual Argument.} Managing diversity also has potential for competitive advantage through improved problem solving and decision making. This relationship is based on a rationale similar to the creativity argument. For example, previous writers have noted that quality circles and other decision making teams comprised of persons from differing experience levels, functional
and theoretical orientations, and demographic characteristics improve the quality of decision making by bringing diverse viewpoints into the process. The injection of contrasting points of view helps to prevent the kind of 'tunnel vision' which is often experienced by more homogeneous groups.53

A specific theoretical framework that places emphasis on diversity in senior manager teams is the creative management (CM) model for strategic planning in organizations. Proponents of the CM model explains its point of emphasis this way:

"Implicit in the CM model is the assertion that organizations capable of creating tomorrow's businesses while maintaining today's will require a diverse group of senior managers, able to perceive the world differently, yet able to participate in a process that transcends these different views to enact a complex organizational reality."54

Although the type of diversity explicitly addressed in this theory is cognitive style, the basic logic of the need for representation of people who perceive the world differently can clearly be applied to other dimensions of diversity including gender, racioethnicity, and age.

Empirical Research. A series of research studies conducted in the 1960s at The University of Michigan found that heterogeneous groups produced better quality solutions to problems than did homogeneous groups. The dimensions of group diversity included personality measures and gender. In one of the studies, 65 percent of heterogeneous groups produced high quality solutions (defined as solutions which provided either new, modified or integrative approaches to the problem) compared to only 21 percent of the homogeneous groups. This difference was statistically significant. In commenting on the results, the authors note that "mixing sexes and personalities appears to have freed these groups from the restraints of the solutions given in the problem."55

These early findings have been confirmed in later studies on the effects of heterogeneity on group decision quality. For example, in experiments using college students and a task for which the quality of alternative solutions was known in advance, Wanous and Youtz found that
'solution diversity' (a measure of the amount of difference in perspectives contained in the group) was positively correlated to decision quality.56

A similar result occurred in a study of problem solving ability among groups in which the diversity was defined by a behavioral style test called the Personal Profile System. The test identifies the four style categories of dominance, influencing of others, steady and compliant. Diverse groups were composed of people of all four styles while homogeneous groups consisted of people who all tested to have the same style orientation. An a priori evaluation procedure enabled the researchers to determine "best" solutions to the assigned problem. Results indicated that the style-diverse groups produced significantly higher quality decisions than the homogeneous groups.57

In still another example, researchers studied the effect of tenure and functional diversity on innovation using a sample of 409 people from 45 new product development teams spread over 5 high-technology companies. Findings indicated that tenure diversity was associated with greater goal clarity and priorities and functional diversity was associated with increased communication outside the teams. These factors in turn were associated with higher ratings of team innovation and overall performance. The authors also found that diversity impeded implementation by making teamwork more difficult to achieve. They conclude that:

"These research findings suggest that simply changing the structure of teams (i.e. combining representatives of diverse functions and tenure) will not improve performance. The team must find a way to garner the positive process effects of diversity and to reduce the negative direct effects."58

This conclusion is a clear re-statement of the basic proposition that we have held throughout this monograph regarding the effects of diversity on performance.

Still another study on the effect of diversity on problem solving illustrated the potential importance of time horizon in assessing the effects of diversity. Watson, Kumar & Michaelsen studied group process and problem solving quality in 17 culturally homogeneous groups and 19 culturally diverse groups of college students. The diverse groups were defined as those having
members from two or more nationalities and three or more racioethnic backgrounds. Thus these groups were much more diverse than would be typical in organizations. The homogenous groups were composed of 81 White Americans. The results of the study indicated that the homogenous groups had significantly higher scores on both the group process measures and the problem solving measures after five weeks time working together. However, by the time the groups had worked together for 17 weeks, the diverse groups were similar to the homogenous groups on the process measures and were producing better results than the homogenous groups on the range of perspectives and number of alternatives generated toward solving the problem.\textsuperscript{59} These results suggest that the diverse groups may have had more difficulty working together initially leading to lower performance than the homogenous groups, but over time, as they worked through these difficulties, the advantages of diverse groups for problem solving, as identified earlier, began to be realized.

Additional support for the argument that diverse workgroups are better problem solvers comes from the work of Nemeth and Nemeth & Wachter. In a series of studies, they found that the level of critical analysis of decision issues and alternatives was higher in groups subjected to minority views than in those which were not. The presence of minority views improved the quality of the decision process regardless of whether or not the minority view ultimately prevailed. Among the specific differences in problem solving processes which they found were: (1) a larger number of alternatives considered and (2) a more thorough examination of assumptions and implications of alternative scenarios.\textsuperscript{60}

Some writers have noted that too much diversity in problem-solving groups can be dysfunctional. When communication barriers, style conflict, and points of view lack even a core of commonality, decision making may become impossible. Thus another aspect of "managing diversity" is to balance the need for heterogeneity to promote problem solving and innovation with the need for organizational coherence and unity of action on some core dimensions of organizational culture.
In sum, culturally diverse workforces have potential to produce better problem solving due to a combination of greater variety of perspectives brought to bear on the issue, a higher level of critical analysis of alternatives, and a lower probability of group think. *However, it is again important to emphasize that specific steps must be taken to realize these potential benefits of diversity in workgroups.*

It is also noteworthy that the empirical research which suggests that diversity in workgroups enhances creativity, innovation, and problem solving includes a broad range of diversity dimensions. This fact further confirms our conclusion that there is a significant potential payoff in organizational performance for efforts to make decision groups more inclusive of people from different socio-cultural and intellectual backgrounds.

**Social Responsibility and Financial Performance**

In talking with practitioners about diversity-related organization development work including glass ceiling initiatives, we are often told that "managers in my company are not moved by social responsibility motives, they will be committed if we can show that this work has a positive effect on the "bottom line." These comments imply that social responsibility and financial performance do not necessarily go together. Social responsibility refers to a set of community and ethics-oriented issues among which equal employment opportunity is one of the most prominent.\(^{61}\) The bottom line typically refers to yearly profits. A considerable amount of empirical research has been conducted examining the relationship between social responsibility and financial performance. Although some studies have found weak correlations (e.g., a study of opinions of 241 by Carroll et al.\(^ {62} \)), most of the research indicates that there is a strong positive correlation between performance on social responsibility goals (including equal opportunity) and performance on financial measures such as profits and market share.\(^ {63} \) Research also indicates that investment funds which target companies with strong reputations on social responsibility goals have returns on investment which are among the highest in the world.\(^ {64} \)
Glass Ceiling Initiatives and Financial Performance

Two recent studies have explicitly examined the effect of excellence in glass ceiling initiatives on the financial performance of firms in the stock market. In one study, Covenant Investment Management rated the performance of the Standard and Poors 500 on a series of factors relating to the hiring and advancement of women and non-whites, compliance with EEOC and other regulatory requirements, and employee litigation. They then compared these ratings to the annualized return on investment in the stocks of the same companies over the most recent five year period. Their analysis indicated that the annualized return for the companies rated lowest on the glass ceiling-related measures (the bottom 100) averaged 7.9 percent compared to 18.3 percent for the top 100. Firms that were intermediate on the glass ceiling-related measures had returns of 15-16 percent. Thus the stock market performance of the firms that were high performers on the glass ceiling-related goals was 2.5 times higher than that of the firms that invested little in glass ceiling-related issues.65

A second study examined the impact on stock prices of announcements of U.S. Department of Labor awards for exemplary affirmative action programs during the period of 1986 through 1992. They also examined the effects of the announcement of settlements of discrimination lawsuits on stock returns to corporations. Results indicated that stocks of award-winning companies did increase significantly during the days immediately following the announcement of the award. They also indicated that announcements of the settlement of a discrimination case had a significant negative effect on the stocks of the firms found at fault in the cases during the days immediately following the announcement. Thus announcements of positive results on glass ceiling-related work led to higher stock performance and announcements of negative results on glass ceiling-related work led to lower stock performance. They conclude that "quality affirmative action programs are clearly valued in the marketplace."66
Glass Ceiling Initiatives: Industry Analysis

There is relatively little systematic research available on the extent to which the occurrence of glass ceiling effects, or the success of organizational interventions to address them, differ among organizations in different industries. However, there are some indications of industry differences. For example, in their analysis of the problems encountered by women professionals, Rosen, Miguel and Pierce report that there were industry differences in the attraction and retention of women (see endnote 9). Their general conclusions are that women experience more career problems in industries that have historically employed relatively few women such as manufacturing, mining and broadcasting, and that they fair comparatively well in industries that have traditionally employed many women such as education, banking and health care. It is worth noting however that in the past 15-20 years women have been represented in large numbers in manufacturing assembly operations, especially in industries such as electronics and telecommunications. Thus, the explanation of industry differences in the experience of women, and even the patterns themselves, are complicated and often difficult to interpret. For example, among the 18 companies listed in the Business Week analysis of "best companies for women" (August 6, 1990), 7 were manufacturing firms.

Among the specific industry differences reported in the Rosen et al., study are: (1) the successful recruiting of women was most difficult in manufacturing, broadcasting and publishing and least difficult in the banking and health services industries (2) the types of career obstacles reported by women differed in that dual career conflicts and an absence of female role models were most frequently mentioned in the mining, manufacturing and banking industries. The inclusion of banking here is somewhat surprising in view of the fact that women often make up 60-70 percent of the workforce in banks.

Regarding the specific issue of glass ceiling effects, they report that upward mobility for women was viewed as particularly difficult in the broadcasting industry, and relatively less difficult in business services and the health industries.
Data on industry differences in glass ceiling effects for non-whites is also scarce. For this report, we analyzed the industry breakdown among the 30 companies listed as best places for blacks to work in the report published in the February 1992 edition of Black Enterprise Magazine. Eight of the 30 companies were in the consumer products industry. Next in frequency was a multi-industry tie between telecommunications, automobiles, other manufacturing firms, oil and chemical companies and banking/financial services (three mentions each). We find that the limited amount of data, and the tendency for writers to employ different criteria in assessing organizations, makes any firm conclusions about industry differences very precarious. Moreover, we are not aware of any more thorough analysis of industry differences on glass ceiling issues which examines outcomes with appropriate controls such as organization size.

**CONCLUSIONS AND IMPLICATIONS**

Based upon the information presented in this paper the following main conclusions seem warranted:

1. To the extent that organizations with diverse workforces can attract, retain and promote maximum utilization of people from diverse cultural backgrounds, they will gain competitive advantages in cost structures and in maintaining the highest quality human resources.

2. To the extent that organizations can capitalize on the potential benefits of cultural diversity in work groups they will gain a competitive advantage in marketing, creativity, and problem solving.

3. Diversity in workforces can potentially be leveraged to create a competitive advantage in marketing, creativity, and problem solving. Therefore, the attraction and retention of such a workforce presents an important economic opportunity for organizations.
4. Organizations which excel at leveraging diversity, including the hiring and advancement of women and members of racioethnic minority groups, and which provide an overall climate of equal opportunity to contribute, should experience better financial performance compared to organizations which perform poorly on managing diversity related criteria.

These conclusions focus attention on the need for information about how to achieve excellence in managing diversity. Addressing this in detail is beyond the scope of this paper, however we will offer here some suggestions for practitioners and for future research on workforce diversity.

**Implications For the Practice of Management**

The data reviewed above strongly suggest that the affective and achievement outcomes of individuals are influenced by group identities, and that organizational outcomes such as turnover rates and absenteeism are ultimately affected. The question remains however, can focused attention on diversity issues in workgroups really impact these outcomes? In this regard, information from several sources on diversity in U.S. firms indicates that frustration over career growth and cultural conflict with the dominant, white-male culture are major factors behind the less favorable turnover, absenteeism and satisfaction levels for women and racioethnic minorities. For example, two recent surveys of male and female managers of large American companies found that although women expressed a much higher probability of leaving their current employer than men and had higher actual turnover rates than men, their major reason for quitting was lack of career growth opportunity or dissatisfaction with rates of progress. It is also instructive that one of the surveys found that women have higher actual turnover rates than men at all ages, and not just during the years when they are bearing children or raising young children.67

Thus organizations wishing to improve the retention of women must give attention to career growth in addition to work-family role balance issues. This does not necessarily
mean promotions. Increasingly, promotion opportunities are declining in organizations due to restructuring. However, within existing job levels the opportunity for assignments to the most challenging projects and job tasks must be equally available to all qualified persons.

Additional clues on how to manage diversity to improve effectiveness measures like turnover can be found in reports of organizations that have changed benefits and work schedules as an adjustment to the greater career interests of women. In one study, companies were assigned an "accommodation score" on the basis of the adoption of four benefit-liberalization changes associated with pregnant workers. Analysis revealed that the higher a company's accommodation score, the lower the number of sick days taken by pregnant workers and the more willing they were to work overtime during pregnancy.68

In two other studies, the effect of company investment in day-care on human resource costs was investigated. In one study, turnover and absenteeism rates for working mothers using a company-sponsored child development center were compared to those who either had no children or had no company assistance. Results indicated that absenteeism for the day-care users versus the other groups was 38 percent lower and they had a turnover rate of less than 2 percent compared to over 6 percent for the non-benefit groups. In a second study, a company that initiated an in-house child care facility, found that worker attitudes improved on six measures including organizational commitment and job satisfaction and that turnover declined by 63 percent. Similarly encouraging results are reported by the SAS Institute, a computer software firm where the company absorbs most of the costs of an on-site day care facility. According to company spokespersons, the company's support of child-care is a major reason for the company's employee turnover rate of just 7 percent, a figure which they say is less than a third of the industry average.69

It should be noted that organizational support for child care, and not on-site child care per se, seems to be the key factor in improving organizational outcomes. Not every company which has invested in on-site child care has witnessed drastic improvements in absence or turnover rates. Goff, Mount & Jamison studied absenteeism effects of on-site child care at a
large midwestern electronics and communications firm. They found that it was not on-site child-
care per se which reduced absence, but rather that support from supervisors regarding work-
family conflict issues and satisfaction with child-care arrangements were related to lower 
absence rates among employees who were parents.70

Another management response to increasing diversity in the workforce is greater use of 
flextime work scheduling. A recent field experiment assessing the impact of flextime use on 
absenteeism and worker performance found that both short and long term absence declined 
significantly and that three of four worker efficiency measures increased significantly under 
flextime.71

Finally, an empirical study of the effects of gender diversity on task motivation of men 
and women offers some insight into what specific conditions are needed to avoid motivational 
negatives and create positive motivational responses to increasing diversity in workgroups. In 
the study, individual performance on a simple motor task was taken as an indicator of 
motivation. Performance of same-gender and mixed-gender was compared with appropriate 
controls for individual ability differences. Findings indicated that both men and women were 
more highly motivated in the mixed-gender groups than they were when either working alone or 
in same-gender groups. The authors identified three conditions of the study which they believe 
were key to the positive result in the mixed groups: (1) all group members had approximately 
equal ability to perform the task; (2) members were challenged to demonstrate their 
effectiveness to one another; and (3) good performance by any member posed no threat to other 
members.

We translate these three conditions into the following implications for practice. The first 
condition suggests that care must be taken to ensure that all members have the necessary 
qualifications to perform the assigned tasks well. One application of this advice is that valid job 
standards should not be sacrificed in order to change the demographic representation of work 
groups. The second condition might be achieved by using 360 degree feedback for performance 
of all members of a workgroup so that the organizational welfare of each member is more
dependent on establishing one's competence with all members of the work team, and not just with superiors as too often happens under traditional evaluation systems. The third condition reinforces the point that organizational efforts to manage diversity and eliminate the glass ceiling must be perceived as win-win efforts rather than zero-sum games with White women and non-whites on one side and White males on the other. This is no easy task, but two strategies toward this goal are:

1. In most organizations, actual promotion and hiring rates for White men have not declined dramatically relative to their proportional representation in the labor pool and to those of White women and non-whites in recent years. Where this is true, the simple act of communicating the true data may diffuse tension between majority-group members and others.

2. Communicate the business reasons for diversity initiatives and focus on the organizational goals that are at stake rather than implications of actions for individuals.

Although accurate dollar cost savings figures from managing diversity initiatives of specific companies are rarely published, a recent published report of the early savings of Ortho Pharmaceuticals stated savings of $500,000, mainly from lower turnover among women and ethnic minorities.73

From an economic viewpoint, the potential cost savings and revenue enhancements of organizational initiatives to effectively manage diversity must be judged against the investment necessary to implement them. Nevertheless, the limited available data strongly suggest that managing diversity efforts undertaken by some leading organizations have been somewhat successful in improving performance on absenteeism, turnover, and productivity.

The failure of organizations to manage women and racioethnic minorities and other non-majority-group members as successfully as white-males translates into unnecessary costs.
Examples of these costs were offered in previous segments of the monograph. Since the diversity of workforces is growing throughout the world, the costs of not managing diversity well will escalate greatly in the coming years. Organizations that do not make appropriate changes to more successfully retain and utilize persons from different cultural backgrounds can therefore expect to suffer a significant competitive disadvantage compared to those that do. Alternatively, organizations which are able to pre-empt competitors in creating a climate where all personnel have equal opportunity and motivation to contribute should gain a competitive cost advantage.

Additional recommendations to organizations for capturing the potential of diversity include:

1. Hire a diverse group of employees and put them in positions to impact the development of marketing strategy, as well as other major problem solving and decision making positions.

2. Hire consultants with expertise on specific market segments along with focus groups and consumer surveys to better understand market segments defined by gender, racioethnicity or other culture-related identities.  
   
3. Invest in diversity-related education programs. For example, Monsanto Co. requires that every employee participate in two days of diversity awareness training, and selected officials participate in an additional four days, to gain a more in-depth understanding of diversity issues. Likewise, Levi-Strauss is reported to invest $5 million per year in valuing diversity educational programs.

4. Identify elements in the organizational culture which may contribute to high turnover among women, non-white men or persons of other identity groups, and then create an action plan to eliminate these factors. For example, General Electric has recently developed a “Glass Ceiling Self-Audit” process. According to Director of Diversity, Dr. Eugene Andrews, the process is designed to position GE to address the glass ceiling challenge proactively rather
than simply responding to pressure from internal or external constituents.

5. When assessing the results of diversity, it is important to allow a sufficient timeframe before drawing conclusions about the effects. This is important because for certain types of tasks, diverse groups may need more time to reach a fluent process than homogeneous groups, and because some of the benefits of diversity (e.g. the use of diversity to increase market share) may not be apparent in the short term.

6. Invest in the development of technology to measure the effectiveness of organizational interventions for managing diversity. There is a need for field research on the progress of organizational change tools such as awareness training, dialogue groups, skills-training, identity-related support groups, and so on. This is an area where partnerships involving industry, government, and educational institutions should be extremely beneficial.

7. Utilize a 360 degree feedback process with explicit attention to diversity issues. General Electric is among the organizations which are doing this and reports that they are finding it to be an effective tool in promoting cultural change.

8. Implement mechanisms to assist new employees in becoming socialized to the organization and all employees in developing better relationships with supervisors. An innovator in this area is Monsanto Corporation. Their "JOIN UP" initiative provides facilitated discussion sessions for all employees at the time a new reporting relationship is established. Topics of discussion include clarifying mutual expectations, organizational norms, and possible barriers to success. According to Diversity Development Director, Thomas Cummins, the goal is to establish a collaborative environment between a supervisor and her/his direct reports early in the relationship. Monsanto also provides informal counseling through their "Consulting Pairs" initiative (a registered trade-mark of Pope and Associates). Peers are available on an everyday basis to provide an alternative to human resource professionals for advice and counsel on a variety of workplace issues.
9. Take steps to establish accountability for follow-up and implementation of change processes related to diversity. For example, under the direction of Kim Cromwell, Ron Glover and Judith Ashley, Digital Equipment Corporation has established a methodology called "the Diversity Business Planning Process." The process focuses manager attention on setting measurable goals related to diversity within each major business unit. Progress against these goals is assessed as part of the regular business reviews of the company. Areas in which goals are set include representation (demographic profile data), organization climate, management practices and globalization. Measurement tools used to assess progress include same-identity focus groups (e.g. groups of people aged over 40, groups of gay/lesbian or bisexual people etc.), employee surveys, employee roundtables, forums of senior managers from diverse cultural backgrounds, and computerized human resource data such as representation by organization level and salary equity.

**Recommendations for the Department of Labor**

Because diversity in the workforce is a source of national competitive advantage for the U.S., steps to reinforce the leveraging of diversity in the workplace should be a high priority for the government. Certainly, many of the activities which have been undertaken by the Glass Ceiling Commission, including the funding of this monograph, are valuable in this regard and should be continued. As part of our research for this paper, we contacted six managers from leading organizations who are responsible for organizational development in managing diversity and asked them for input on what the government might do to support and enhance their efforts. Based on their responses and our own thinking, we make the following suggestions for the continued role of the federal government.

1. **Funded research.** We suggest creating a funded research program which limits eligibility to teams which partner academics with corporate managers to design and implement research in specific areas which are identified by the
collective results of the monograph series.

2. **Recognition awards.** The Exemplary Voluntary Efforts Awards and the Opportunity 2000 awards are a positive beginnings on this. However, we suggest expanding the number and types of awards that are available, increasing the visibility of the existence of the award winners, and developing an award on the level of the "Baldrige" award for quality.

3. **Tax incentives.** The provision of tax incentives for the hiring of teachers as interns would increase joint efforts of government of industry in the training and development of teachers. The goal of this action would be to increase the awareness among teachers of the realities and needs of employers for workers in the future, so that they could do a better job of preparing students.

4. **Employee Loans.** For years, industry has leased professionals to community organizations and to government. This could be expanded with more government funding for such efforts. In addition, the government could consider making loans of people to industry to expand resources in the private sector to work on the challenges of managing diversity and breaking the glass ceiling.

5. **Re-direction of Compliance Reviews.** Substantial improvement has occurred in the level of sophistication in reviews of organizational practices around glass ceiling issues during the existence of the Glass Ceiling Commission. Nevertheless, there is still a perception among some in industry that government reviews need to focus more on action steps and organizational accountability to follow up on recommendations.
Implications For Future Research

This monograph has reviewed a significant amount of relevant research demonstrating the importance of managing diversity and glass ceiling initiatives for effective performance of organizations. Additional research is clearly needed, especially on the following issues:

1. Identifying techniques that are most effective in minimizing potential performance losses associated with diversity such as reduced communication efficiency, higher interpersonal conflict, and lower employment satisfaction and morale for members of the majority group.

2. More field research on whether and how diversity can be leveraged to increase creativity, innovation, and team problem solving. Much of the research to date on these issues has been done using college students as subjects. We need more industry-based research, including field experiments that allow researchers to control other variables as they do with student subjects in order to isolate the effects of diversity more carefully.

3. Research which examines connections between performance on diversity/glass ceiling-related measures and financial performance measures must go beyond hiring and advancement of women and non-white men, and litigation indicators. More comprehensive assessments of diversity climate are needed within the same organization at different points in time and across organizations in similar industries, in order to better test the concepts put forth in this paper (namely, that it is the overall diversity climate that determines the performance implications of diversity).

4. Research which examines the effectiveness of various intervention techniques related to diversity such as awareness training, mentoring programs, core groups, identity-related support groups, culture audit methods etc.

5. Research which seeks to validate measurements that are useful in the area of managing diversity.
Concluding Comment

While there is a great need for more research, the arguments and empirical research presented here strongly suggest that the United States has a unique opportunity for competitive advantage in international competition if we learn to leverage our workforce diversity properly. At the same time, because we are the most diverse nation among the major industrial countries in the world, failure to manage diversity well threatens our viability in an increasingly global economic arena. These facts should be useful in building commitment within private industry and within the government to continue the promotion of managing diversity, including glass ceiling initiatives, as national agenda items of major importance.
ENDNOTES


3 For further explanation of these concepts, see J.M. Rabbie and M. Horwitz, "Categories Versus Groups as Explanatory Concepts in Intergroup Relations," *European Journal of Social Psychology*, 1988, 18, 117-123.


10 Further details of the Interactional Model of Cultural Diversity (IMCD) can be found in T.H. Cox's book (endnote 4).


14 This definition has been suggested by N.A. Jans, "Organizational Factors and Work Involvement," *Organizational Behavior and Human Decisions Processed*, 1985, 35, 382-396.


25 J.E. Olson, I.H. Frieze, and D.C. Good (endnote 12).


44 For details of this strategy, see B.H. Lawrence, "Big M.A.C.,” Black Enterprise, 1988, 18(11), 304-306.


60 For further discussion of diverse workgroups, see C.J. Nemeth, "Dissent, Group Process, and Creativity" (endnote 48); C.J. Nemeth and J. Wachter, "Creative Problem Solving as a Result of Majority Versus Minority Influence" (endnote 48).


64 For specific examples, see N.S. Charles, "When Profits Meet Principles," Black Enterprise, 1989, 19(10), 83-86.


72 See N. Kerr and M. Sullaway, "Group Sex Composition and Member Task Motivation," *Sex Roles*, 1983, 9, 403-417.

73 The data on Ortho is provided in J. Bailey, "How to be Different but Equal," *Savvy Woman*, November 1989, 47.


75 For further details on this example, see A. Cuneo, "Diverse by Design: How Good Intentions Make Good Business," *Business Week*, October 23, 1992, 72.

77 As part of this project, we contacted six of the world's leading organizations in managing diversity: AT&T, Avon Inc., Corning Inc., Digital Equipment Corporation, General Electric Company, and Monsanto. Five of the six organizations provided input regarding: 1) innovative and effective strategies they are using to manage diversity and break the glass ceiling 2) recommendations for the support of research or practice of managing diversity.
ANOTATED BIBLIOGRAPHY

Aamodt, M. G., and Kimbrough, W. W. (1982). Effect of group heterogeneity on quality of task solutions. *Psychological Reports, 50*(1), 171-174. Empirical paper which compared group performance by placing subjects into groups based on either trait of homogeneity or heterogeneity with the other group members and were given a group task to complete. Results indicate heterogeneous groups produce superior answers over those produced by more homogeneous groups.

Ancona, D. G., and Caldwell, D. F. (1992). Demography and design: Predictors of new product team performance. *Organization Science, 3*(3), 321-341. This empirical study investigates the impact of diversity on team performance using 409 individuals from 45 new product teams in 5 high-technology companies. Functional and tenure diversity were found to each have their own distinct effects.


Bailey, J. (1989, November). How to be different but equal. *Savvy Woman*, 47. Magazine article which discusses data reported by Ortho Pharmaceuticals regarding its savings which resulted from lower turnover rates.
Bantel, K. A., and Jackson, S. E. (1989). Top management and innovations in banking: Does the composition of the top team make a difference?. *Strategic Management Journal*, 10, 107-124. Empirical paper which examines the relationship between the social composition of top management teams and innovation adoptions in a sample of 199 banks. Average age, average tenure in the firm, education level, and heterogeneity with respect to age, tenure, educational background, and functional background were examined. Results indicate that more innovative banks are managed by more educated teams who are diverse with respect to their functional areas of expertise.


Charles, N. S. (1989). When profits meet principles. *Black Enterprise*, 19(10), 83-86. Magazine article which discusses several investment funds targeted at socially responsible companies and provides data on their successful investment results.

Covenant Investment Management. (1993, April 21) Press release. Chicago IL. This one-page document describes the companies research on the relationship between performance on equal opportunity-related goals and stock performance over a five-year period.


Cox, T. H. (1991). The multicultural organization. *The Executive*, 5(2), 34-47. Article which describes a model for understanding the required features of a multicultural organization and reviews tools that pioneering companies have found useful in changing organizations toward the multicultural model.


Cox, T. H., and Nkomo, S. M. (1986). Differential appraisal criteria based on the race of the ratee. *Group and Organizational Studies*, 11, 101-119. Empirical study of the effects of race on performance appraisal rating criteria which illustrates that even when overall ratings between race groups are the same, there can be subtle differences which disadvantage minority group members.


Filipowski, D. (1991). Texaco's penalty for sex discrimination. *Personnel Journal*, 70(12), 72-78. Interview with the plaintiff who successfully brought a sexual discrimination lawsuit against Texaco. This was the largest award ever granted to an individual in this type of case.

Fouke, C. J. (1989). Sensitivity to cultures builds foreign markets. *Marketing News*, 23(13), 8-9. Article which discusses marketing guidelines (such as avoiding negative stereotypes and consulting with international colleagues) for companies undertaking campaigns using images from a non-Western continent or culture.


Greenhaus, J. H., Parasuraman, S., and Wormley, W. (1990). Effects of race on organizational experiences, job performance evaluations and career outcomes. *Academy of Management Journal*, 33, 64-86. Using data from several hundred managers over three large companies, these authors report on race effects on performance appraisal ratings and plateauing. Results generally indicate that the career experiences of non-whites are much less favorable than those of whites.


Hoffman, L. R., and Maier, N. R. F. (1961). Quality and acceptance of problem solutions by members of the homogeneous and heterogeneous groups. *Journal of*
Abnormal and Social Psychology, 62(2), 401-407. This is an early study showing the potential for diversity to improve the quality of problem solving in groups.

Hurst, D. K., Rush, J. C., and White, R. E. (1989). Top management teams and organizational renewal. Strategic Management Journal, 10, 87-105. Conceptual paper explaining a creative management model that goes beyond conventional strategic management and identifies the behaviors of top managers needed for the ongoing renewal of their business. It proposes these behaviors can be aligned with different and distinct cognitive styles or types, and concludes that top management groups should be composed of a mix of types for maximum benefit.


Jung, M. (1988). Marketing's gender gap: Men are paid more than women at almost every level; How salary gap affected the lives of two women. *Marketing News*, 22(26), 1,5. Article reports the results of a marketing study that found pay discrepancies between men and women in the marketing industry.

Kanter, R. M. (1983). *The change masters*. New York: Simon & Schuster. Reports the results of the authors in-depth study of factors which differentiate companies that have been highly innovative from those which have not.

Kanter, R. M. (1977). *Men and women of the corporation*. New York: Basic Books. Theory and some empirical data showing the effect of being one of kind or one of few in a social system dominated by people of different demographic profile. Offers a logic for understanding effects of being a solo or token including higher visibility, contrast effects and a tendency to be stereotyped.


Kotkin, J. (1987). Selling to the new America. *Inc.*, 9(8), 44-52. Article provides several case examples of organizations capitalizing on America's shifting demographics by making special marketing efforts directed at minorities.


Lawrence, B. H. (1988). Big M.A.C. *Black Enterprise*, 18(11), 304-306. Article describes Stroh Brewery Co.'s efforts at strengthening its affirmative action commitment through increased sales with minority vendors, and hiring and promotion of minorities within the company.


Morrison A. M. (1992). *The New Leaders*. San Francisco: Jossey-Bass, Inc. Reports the learnings from an intensive study of 16 organizations on what they are doing to respond to the challenge of increasing diversity in the workplace, and identifies a set of common denominators which were found in the more responsive companies.


Nelton, S. (1988). Meet your new work force. *Nation's Business*, 76(7), 14-21. Article which discusses the competitive advantages companies stand to gain by recognizing diversity already exists and by managing is effectively. Provides examples of measures companies can take to manage diversity.


The new face of America. *Time*, Fall 1993, 15. This article discusses the high rates of immigration into the U.S., demographic statistics on the future population and implications of these changes for society including the employment arena.


Olson, J. E., Frieze, I. H., and Good, D. C. (1987). The effects of job type and industry on the income of male and female MBAs. *Journal of Human Resources*, 22(4), 532-541. Empirical study which examines whether sex differences in income, job area, and industry continue to exist when education and work experience are controlled. The study used a sample of 1297 men and woman who received an MBA degree from the same university.


Management Journal (in press). Empirical paper which examines the impact that announcements of U.S. Department of Labor awards for exemplary affirmative action programs have on stock return behavior of winning organizations. It also examines the effect that announcements of discrimination lawsuit settlements have on corporate stock returns.

Pradhan, A. (1989). Ethnic markets: Sales niche of the future. National Underwriter, 93(45), 18. Case example of an insurance agency that used several diversity-leveraging strategies to develop a niche market that focuses on Asian Indians while building its office into one of the top 10 producers of MONY Financial Services.


Sauser, W. I., Jr. (1988). Injecting contrast: A key to quality decisions. *Advanced Management Journal*, 53(4), 20-23. Article provides recommendations for managers to improve the quality of their decisions by injecting contrast into the decision-making process. Techniques include inviting diverse view points and considering a variety of alternative solutions.

Schein, E. (1978). Organizational socialization and the profession of management. *Industrial Management Review*, 9, 1-16. Theoretical paper which examines the process of organizational socialization--the process by which a new member learns and adapts to the value system, norms and required behavior patterns of an organization, and points out the dangers of non-conformity or over-conformity.


and job involvement for employees from manufacturing firms. Job involvement was significantly correlated with turnover.

South, S. J., Bonjean, C. M., Markam, W. T., and Corder, J. (1982). Social structure and intergroup interaction: Men and women of the federal bureaucracy. *American Sociological Review*, 47, 587-599. Questionnaire data from 230 female employees in a large federal bureaucracy were analyzed to test two theories on the effects of females' proportional representation in work groups on intra- and intergender relations. Data suggests that the proportional size of a minority subgroup is negatively related to its frequency of contact with, and amount of social support received from, the majority.


Thornburg, T. H. (1991). Group size and member diversity influence on creative performance. *Journal of Creative Behavior*, 25(4), 324-333. Empirical study which examines the proposition that creative performance, as measured by the generation of ideas, will be greater in a dyad than in either a 4-person group or individuals working independently. The study also examined the proposition that in groups, the per-person production of creative ideas will be greater when group diversity is present.
Triandis, H. C., Hall, E. R., and Ewen, R. B. (1965). Member heterogeneity and dyadic creativity. *Human Relations*, 18, 33-55. Early empirical study illustrating the potential value of diversity to increase creativity in groups, but also illustrates that certain conditions must be present (e.g., people of similar ability and who are familiar with one another's differences in attitudes/perspectives).

Trost, C. (1990, May 2). Women managers quit not for family but to advance their corporate climb. *Wall Street Journal*, B1. Discusses results of a survey conducted by a consulting group which calls into question the assumption that differential turnover rates for women versus men are due to personal decisions to quit to raise children.


Tsui, A.S., Egan, T.D., and O'Reilly, C.A. (1992, December). Being different: Relational demography and organizational attachment. *Administrative Science Quarterly*, 549-580. Empirical study of 151 groups showing that increasing work-unit diversity was associated with lower levels of psychological attachment among majority group members.

USA Today (1987, December 2)

quality of a group's final decisions, using 594 college students enrolled in an introductory course on management and organizational behavior.

Watson, W. E., Kumar, K., and 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. Empirical study of college students observed over a 17-week period found that groups that were homogenous (on nationality and race) had higher process and task performance scores early on, but as time passed the process losses associated with the diverse groups disappeared and they began to show task advantages over the homogeneous groups.

Westerman, M. (1989). Death of the frito bandito. *American Demographics*, 11(3), 28-32. Article discusses negative stereotypes previously used in some marketing strategies and how some companies are developing a new type of ethnic advertisement referred to as "positive realism" which portrays minorities in authentic, optimistic settings.

