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Examining Empirical Evidence on Diversity Effects: How Useful Is Diversity Research for Public-Sector Managers?

This article reviews the body of empirical research on work-related consequences of human diversity and presents an agenda for future investigations. Ideally, a synthesis of research findings to inform managing-for-diversity efforts should enable managers to interpret events in their own administrative contexts. Our assessment of the diversity literature suggests that managers are using largely untested assumptions as a basis for diversity policies, strategies, and actions. We call for greater contribution from public administration scholars to the body of research focusing on how human diversity can best be managed to produce positive results for individuals and their work organizations.

The philosophy of "managing for" diversity is gaining popularity, and both public- and private-sector organizations are investing significant financial resources, time, and energy into diversity missions, programs, and strategies. Yet empirical evidence about the consequences of diversity in work organizations is limited, and many of the existing studies present conflicting and inconclusive findings. Public managers who want to integrate a managing-for-diversity approach into their leadership behaviors and into the policies, structure, and culture of their organizations are likely to have a difficult time identifying lessons from the research literature that can be reliably applied to actual work situations.

This article reviews the empirical research on work-related diversity and presents an agenda for future investigations. By assessing the quality of the empirical literature and summarizing study findings, we hope to inform the philosophy and practice of managing for diversity. The assembly of reliable, generalizable, and valid findings from diversity research can provide managers with a realistic understanding of what to expect when diverse people work together. Interpretation of a body of research of sufficient quality and quantity can help administrators make sense of their own situations and understand what is going on in actual workplace interactions (White 1994). Ideally, a synthesis of research findings to inform managing-for-diversity efforts should enable managers to interpret events in their own administrative contexts and to understand, for example, why some teams are effective and other teams fail, or why some groups do not produce expected "creative" problem solutions when others do. Our assessment of the diversity literature suggests that managers are using largely untested assumptions as a basis for diversity policies, strategies, and actions.

We hope to inspire new research efforts to increase the utility and accessibility of the diversity literature to managers in the public sector. The number of diversity studies is increasing, demonstrating the promise of di-

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versity research. Involving public administration scholars in the diversity-research arena is critical to the development of reliable and defensible lessons for managing for diversity in the public sector. Given the growing diversity of the public-sector workforce, better understanding of the organizational context and potential consequences of diversity is needed.

Managing for Diversity

The concept of diversity refers to the collective (all-inclusive) mixture of human differences and similarities along a given dimension (Cox 1995, 246). Dimensions of diversity among workforce members include race, culture, religion, gender, sexual preference, age, profession, organizational or team tenure, personality type, functional background, education level, political party, and other demographic, socioeconomic, and psychographic characteristics. Diversity measures are assumed to capture a perception of likeness and otherness among individuals in a group or organization. While our definition represents the prevailing view of the construct in the U.S. literature, the definition of the term varies from country to country. Additionally, our definition has been challenged by those who, for normative reasons, believe diversity should pertain only to a particular disadvantaged group or to a set of disadvantaged groups. Some writers argue that using the term as a "catch phrase" for all perceptions of likeness and otherness diverts attention from disadvantaged groups or glosses over the fact that the groups captured by a broader definition do not face equal prejudice or conditions in the workplace (Caudron and Hayes 1997). Some researchers have called for increased attention to certain diversity dimensions. In particular, concern has been expressed that researchers in recent years have shown less interest in racial and ethnic diversity than they have in other aspects of diversity such as age and tenure (Cox, Lobel, and McLeod 1991).

Interpretations of the concept of managing for diversity vary widely (Carrell and Mann 1995). Ideally, it is treated as a self-conscious, programmatic approach affecting the policies, culture, and structure of an organization that incorporates a diverse workforce as a way to enhance organizational efficiency and effectiveness. However, in many cases in both the public and private sectors, "managing for diversity" is used as a more politically correct term for "affirmative action programs."

Some businesses with a managing-for-diversity approach believe diversity offers a competitive advantage that will enhance their bottom-line performance. The approach is often connected with contemporary management strategies including teaming and group-based work. There is an underlying assumption that diversity produces positive results. For example, it is said to lead to more creative solutions, as members of a heterogeneous group draw on diverse socialization experiences for problem solving. However, often there is also an assumption that negative interpersonal attitudes connected to diversity may affect group cohesion, communication, and performance. This concern may be particularly strong in work cultures where confrontation avoidance is prevalent. Managing for diversity works to improve tolerance and understanding of differences, supposedly resulting in positive outcomes including heightened group commitment and individual satisfaction.

In the ideal sense, managing for diversity is not about setting quotas for minority representation and avoiding discrimination or bias. It differs fundamentally from affirmative action as well as from the "valuing differences" perspective (Gardenswartz and Rowe 1993), focusing on achieving positive outcomes from the interaction of individuals who vary in their degree of heterogeneity. Therefore, studies with implications for the practice of managing for diversity must focus on relationships among workers with varying levels of heterogeneity. Managing-for-diversity practices cannot be informed by results of studies that link characteristics of people in an organization with outcomes, with no attention to the interactions of these people and the causal connection of the interactions to the outcomes. For instance, members of different racial or ethnic groups may be found in the same organization, but they may have little interaction as a consequence of occupational segregation or other factors—the overall diversity of the workforce has little relevance to task outcomes. Similarly, studies of whether men or women have more absences from work and whether the glass ceiling for women still exists do not address diversity and do little to aid managing-for-diversity efforts. To understand how to manage for diversity, we need studies that examine process and outcome consequences of the collective involvement of workers with perceived differences in a task setting and studies that explore the effects of different situational or contextual factors on organizational or group outcomes.

Analysis of the Literature

Our analysis of the utility of research for public managers is based on a review of the English-language empirical literature on diversity in the workplace published from 1961 to 1997 (Wise, Tschirhart, Hosinski, and Bandy 1997) and an update to include published studies through 1998. We had hoped to find enough studies to conduct a rich meta-analysis. Meta-analyses are becoming increasingly popular because electronic databases can facilitate a broad-scale survey of the literature (Johnson, Mullen, and Salas 1995, 776–87), and because the method allows for the identification of

central tendencies, variability, and prediction moderators in a body of research. Meta-analyses involve a variety of techniques that permit researchers to extract cumulative results from a set of individual studies addressing similar questions or pieces of a theoretical model (Wolf 1986).

The first step in conducting a meta-analysis is to find a body of published research that addresses the research question. In our case, the question is, does diversity in work organizations influence specific work outcomes? Two key strategies for finding studies are electronic searches using keywords and "snowballing," which involves checking the references of each identified study to find additional studies that are relevant to the research question. We used both methods. Our electronic search involved seven databases: our university's on-line catalog for books, Expanded Academic Index, Business Index, Educational Resources Information Center (ERIC), PsychINFO, Sociofile, and the Social Planning Policy and Development Abstracts (SOPODA).

Our keyword list was extensive (see Table 1). Because diversity is defined differently across fields of study in the social sciences, a broad treatment of diversity dimensions was needed. The length of the keyword list reflects the large number of outcomes that could possibly be influenced by diversity and the existence of some variance across research streams and academic disciplines in the terms used to capture these outcomes. The list also shows our desire to capture outcomes pertaining to each of three different levels of analysis: individual, group/team, and organization.

Other keywords could have been included, but we felt that the keywords selected reflect the terms typically found in the managing-for-diversity literature or are particularly important to the public sector. One notable omission is keywords to capture personality differences. The literature on the influences of the collective personalities of group members is extensive, but it does not inform an understanding of the sources of heterogeneity more commonly addressed in managing-for-diversity approaches, such as age, gender, and race. In addition to personality differences, we did not search for articles related to religion or sexual preferences, though these dimensions are generally perceived to influence interpersonal attitudes and may influence work outcomes. Still, the keywords we have included offer a rich view of the diversity literature within our imposed limits.

Each keyword search can produce a large number of possible "hits." Our keyword searches for the 1961–97 period generated more than 240,000 possible articles pertaining to diversity. Therefore, a major portion of the search activity involved rejecting pieces that were not relevant. Three factors were necessary for a study to be included in our database: It must involve empirical theory testing (excluding case studies), have a true diversity focus (address heterogeneity/ homogeneity effects), and have results examining workplace outcomes. The bottom line in selecting or rejecting a study was whether it could provide empirical evidence to answer the question: Does diversity in work organizations influence specific work outcomes?

Although the keyword phase of the search produced numerous possible items for the study, only 45 studies published from 1961 to 1997 met all three criteria. Using the snowball method to track backward from these 45 studies to predecessors, we identified 47 additional studies. Using the keyword-search method, the database was updated in June 1999 to obtain studies published in 1998. An additional 14 studies were added to the database in the second phase. Two of the studies were published in 1997 and the remaining twelve in 1998. This gave us 106 empirical studies of the outcomes of diversity (Wise and Tschirhart 1999).

Results from the Analysis of the Literature

To assess the body of research on diversity, we examined breadth and depth of coverage of work outcomes, breadth and depth of coverage of diversity dimensions, publisher characteristics, and research quality. Breadth and depth were investigated by counting and comparing article focus, in order to identify what was being studied. We examined where studies were published (type of journal, disciplinary base, and audience) to uncover issues related to the accessibility of the research to public managers. Research quality was examined on multiple criteria. To see what lessons for public managers could be drawn from the research, we looked for consistent (that is, reliable) findings related to each of our work outcomes. Fi-

Table 1 Keywords for Electronic Database Searches

Diversity dimensions	Work outcome dimensions		
Age, age composition, older worker	Attendance	Creativity	Organization(al) accountability
Cohort, cohort composition	Satisfaction	Legitimacy	Organization(al) change
Disability, handicap, disabled	Conflict	Motivation	Organization(al) identification
Education	Innovation	Sales volume	Organization(al) adaptability
Ethnicity, ethnic composition	Job satisfaction	Justice	Organization(al) strategy
Race, racial, race composition	Market share	Role ambiguity	Organization(al) commitment
Sex, gender, gender composition	Social equity	Public confidence	Promotion, mobility
Tenure, tenure composition	Leadership	Problem solving	Recruiting, recruitment
Team composition	Work quality	Goal achievement	Quality of work life
Group composition	Performance	Cohesion	Turnover, intention to leave
Work background	Profitability	Commitment	Communication
Work experience	Public trust	Attachment	Involvement

nally, we assessed the generalizability and validity of the research to draw some conclusions about the utility of the 106 studies for guiding practices for managing for diversity in the public sector.

Breadth and Depth of Article Focus

We discovered surprisingly little breadth and depth in the articles in our database in terms of the diversity effects investigated and the dimensions of diversity examined. Table 2 summarizes the topic coverage. Most articles covered more than one work outcome and some covered more than one diversity dimension, so the numbers in the table exceed the number of articles in our database. The diversity dimensions with the most coverage are sex (n=82), ethnicity/race (n=58), and age (n=38). Less research has been conducted on outcomes associated with diversity of education and work (n=22), work experience (n=5), functional background (n=17), and team (n=22) and organizational (n=28) tenure. We did not find any studies addressing disability.

The values shown in Table 2 give us an idea of how much cumulative research has occurred to connect a diversity dimension to a specific work outcome. The most frequent analysis (n=14) is the relationship between performance or performance ratings and diversity of sex in a group or rater–ratee dyad. Twelve cases investigate the relationship between sex diversity and group or department leadership. Eleven cases look at the relationship between racial or ethnic diversity and performance or performance ratings. In 10 different contexts, the relationship between sex diversity and individual job satisfaction was examined. There are fewer than 10 references to the relationship between the remaining diversity dimensions and work outcomes.

The studies addressed only some of the work outcomes we searched for as potentially linked to diversity. Coverage at the individual, group, and organizational levels is revealing. The greatest number of analyses examined individual-level work outcomes (n=113). Group-based outcomes had 105 references, and organizational outcomes had 54. We found no articles addressing legitimacy, market share, public trust or confidence, customer or client satisfaction, quality of work life, recruitment, strategy, or accountability. The lack of empirical research on organization-level outcomes is troubling, given the emphasis in the literature on the organizational-level benefits of the managing-for-diversity approach. The promises of the approach for improving public perceptions of an organization and aiding accountability have not been empirically tested.

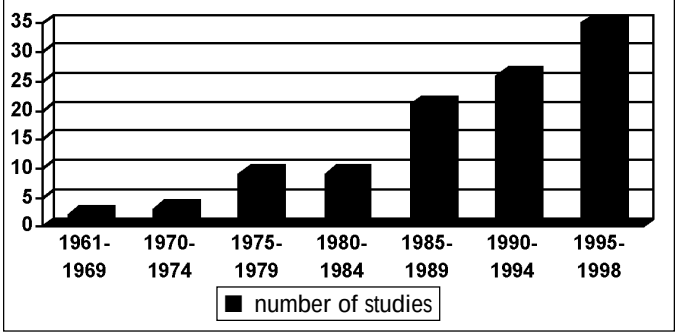
Table 2 Number of Studies by Work Outcome and Diversity Dimension

	Diversity dimensions								
	Age	**Education**	**Ethnicity / race**	**Experience**	**Functional background**	**Sex**	**Team tenure**	**Organization tenure**	***Total references***
Outcomes—individual level									*Individual level=113*
Attendance	1	1	1			1		1	*5*
Communication, mentoring			2			1			*3*
Involvement, attachment, motivation, commitment	3	2	4			3		1	*13*
Performance, ratings	4		11			14	1	2	*32*
Promotion, mobility	3	2	5	1		6		1	*18*
Role ambiguity	1	1	1			1			*4*
Satisfaction	3	1	3			10	2		*19*
Turnover, intention to leave	5	2	2	1		3	3	3	*19*
Outcomes—group level									*Group level=105*
Cohesion and conflict	4		8		2	8	3	2	*27*
Communication	3	2	3	1	2	5	3	3	*22*
Justice						2			*2*
Leadership			5			12			*17*
Performance, ratings	2		7		2	7	1	1	*20*
Problem-solving	1		2		1	2	1	1	*8*
Turnover	2	3		1			1	2	*9*
Outcomes—organization level									*Organization level=54*
Change–creativity / innovation	2	4			4		3	3	*16*
Performance	3	3	1	1	6	2	4	5	*25*
Social equity, justice			2			3			*5*
Turnover	1	1	1			2		3	*8*
Total references	*38*	*22*	*58*	*5*	*17*	*82*	*22*	*28*	

Although the cumulative pattern of research is weak, we see no evidence to support Cox, Lobel, and McLeod's (1991, 828) claim that researchers have shown less interest in racial and ethnic diversity recently than they have in other aspects of diversity such as age and tenure. Attention to ethnicity was moderately strong throughout the end of the 1980s and the early 1990s. Of the 12 studies published in 1998, six focused on ethnicity/race, 11 focused on sex, one focused on age, and none focused on tenure. This demonstrates a continuing interest in outcomes of differences in ethnicity/race and sex. Still, it is clear that not all diversity dimensions have been studied equally throughout the 1961–98 period. The earliest study of gender diversity is from 1961, and the earliest for ethnic/racial diversity is from 1966. Our first study of tenure diversity appeared about 20 years later in 1983, while our earliest study of age diversity was a relative newcomer, appearing in 1988.

Figure 1 shows the growth in the diversity literature from 1961 to 1998. Given the upward trend since 1985 and the 12 studies found for 1998, it is unlikely that the field of study has peaked and is now declining. An examination of where articles have been published over time also is consistent with the argument that the diversity literature is on an upward climb. Although it is still relatively sparse, scholarly research on diversity appears to have gained legitimacy, appearing in top-ranked journals in the 1990s.

Figure 1 Diversity Studies by Year



Publisher Characteristics

Table 3, which indicates where hypothesis-testing and non-case-study articles on diversity have been published, shows that public management journals have made virtually no contribution to this body of research. Many case studies and articles based on equality issues and diversity training-related issues have appeared in journals such as the *Review of Public Personnel Management* (*ROPPA*) and *Public Personnel Management*, but none fit the criteria for inclusion in our meta-analysis. For example, *ROPPA*, which ranked first in public-personnel research (Forrester and Watson 1994, 474–82), periodically runs articles pertaining to the status of women or African Americans in the public workforce, but these are descriptive, not explanatory papers. The Winter 1994 issue offered one article on managing for diversity, but this piece reviewed different ideological perspectives on the trend. A symposium on aging and the workforce was published in the Spring 1995 issue; four articles in this issue could be described as policy discussions and one reported people's attitudes toward aging in the workforce. From 1996 through 1998, we found six articles in *ROPPA* using the diversity keywords. With the exception of one article (Daley and Naff 1998, 41–56), all the papers on diverse social groups published in *ROPPA* over the last three years focused on legal or equality issues.

It is clear from Table 3 that this body of research is led by the journals dominated by writers from business schools and psychology departments. The *Academy of Management Journal* had 16 articles (15 percent of total articles), followed by the *Journal of Applied Psychology* with nine articles (9 percent). Only one of the journals in which we found qualified research ranked as a key journal among scholars in public administration. *Human Relations* ranked fifth overall and fifth in public-personnel research in 1994 (Forrester and Watson 1994, 474–82) and was also ranked in a 1990 review of public administration journals (Colson 1990, 452–71). The journal, however, offered only four articles testing diversity-related hypotheses.

Of the 45 publications in which we found qualified research studies, about 29 percent (n=13) purport to address a practitioner audience in their statement of the journal's aims and scope (shown in bold in Table 3). By extension, we estimate that about 19 studies were published in journals generally accessible to practitioners, but none were targeted at public administration practitioners. There is little likelihood that the findings of research on diversity are being applied directly to managing-for-diversity efforts in the public sector.

Research Quality

Research quality is multidimensional in form and involves a balance of different concerns. For example, for any particular study, the issue of appropriateness of methods involves trade-offs and choices among reliability, generalizability, and validity. The diversity literature we uncovered was weak in all three dimensions of research quality.

One measure of reliability is consistency in findings across different studies. If all studies concluded that racial diversity was associated with group performance, for example, we could reliably conclude that composing groups to capitalize on racial diversity is a good approach to encouraging high performance. Unfortunately, researchers investigating the effects of diversity have not been inclined toward repetition or replication. For many of the matches

Table 3 Journals and Books* with Hypothesis-Testing Articles on Diversity, 1961–98

Name of publication (practitioner audience journals bolded)	Number of Articles
Academy of Management Journal	16
Administrative Science Quarterly	7
American Journal of Sociology	1
American Sociological Review	2
Armed Forces and Society	1
Basic and Applied Social Psychology	1
Computers in Human Behavior	1
General Psychology Monographs	1
Group and Organization Management	3
Hispanic Journal of Behavioral Science	1
Hospital and Health Services Administration	1
Human Relations	4
Industrial and Labor Relations Review	3
Industrial Relations	2
International Journal of Organizational Analysis	1
Journal of Abnormal and Social Psychology	1
Journal of Applied Psychology	3
Journal of Applied Social Psychology	1
Journal of Business and Psychology	1
Journal of Experimental Social Psychology	1
Journal of Labor Economics	1
Journal of Managerial Issues	1
Journal of Organizational Behavior	2
Journal of Personal Selling and Sales Management	1
Journal of Psychology	1
Journal of Vocational Behavior	3
Memory and Cognition	1
Organization Science	1
Organizational Behavior and Human Performance	1
*Organizational Change and Redesign**	2
*Personnel Selection and Assessment: Individual and Organizational Perspectives**	1
Psychology and Aging	1
Psychology of Women Quarterly	5
*Research in the Sociology of Organizations**	1
Scientific Productivity	1
Sex Roles	2
Small Group Behavior	4
Small Group Research	4
Social Forces	4
Social Psychology Quarterly	1
Social Science Quarterly	1
Sociological Perspectives	1
Sociometry	1
Strategic Management Journal	3
Urban Review	1
Total	**106**

of outcome to diversity dimension, we found only one or two studies. Thus, it was impossible to conduct a formal meta-analysis of statistical findings across areas or subareas of the diversity literature.

Fifteen cells in Table 2 offer five or more findings related to an outcome–diversity dimension match, while only four cells offer 10 or more findings. For these outcome–diversity dimension matches we can make no strong conclusions. Either the results were mixed or the measures did not allow comparisons. In addition, results cannot easily be compared for consistency due to the differing use of control variables and interaction terms for the diversity dimensions.

Generalizability of many of the findings is limited due to the use of students as the research subjects. Of our 106 studies, 26 percent used students as the subjects. Student subjects often have no common work history and, if a history exists, it is often based on involvement in course-based projects with limited time frames and investments. A student sample cannot address intervening variables such as existing coalitions and past communications that might contribute to the success or failure of managing-for-diversity efforts. Similarly, when artificial and peripheral problems are put to student subjects, they have little stake in the results and little emotional involvement in the process.

Generalizability also is compromised when the interpersonal interaction under study is artificially constructed. Subjects are likely to behave differently in simulated situations than they do in the field. This generalizability problem is demonstrated by the results of a meta-analysis of 74 laboratory and field studies from the period 1966–81 of the effects of race on performance ratings. The researchers found that both black and white raters gave significantly higher ratings to members of their own race in real-world settings than they did in laboratory simulations (Kraiger and Ford 1985, 56–65). (Many studies examined in this meta-analysis focus on discrimination rather than diversity issues, and these are not included in our analysis.)

Artificial situations were used in 31 percent of the studies we examined. Many of the subjects were asked to perform simple tasks, class assignments, or tasks that have a game-like element (moon survival or tourist problem, for example). These tasks may not be adequate proxies for group problem solving in the public sector (Watson, Kumar, and Michaelsen 1993, 590–91). The task complexity and the context in which the task occurs may function as intervening variables in the diversity–work outcome relationship. In other words, the task and the context may influence the emergence of diversity effects. Artificial scenarios also cannot duplicate other critical factors such as organizational size, structure, technology, and organizational communication mechanisms. In addition, artificial scenarios lack the historical, political, instrumental, and emotional contexts that real managing-for-diversity programs must address. The simulations have no real consequences for personal well-being and do not put at risk an individual's personal need fulfillment.

Another complication with generalizing from studies of diversity effects is the cultural setting of much of the work (Hofstede 1980, 233–57). In our studies, 9 percent

used non-U.S. subjects. Some research indicates that findings obtained for top managers in an individualistic society like the United States are not repeated among executives in a collectivist society (Wiersema and Bird 1993, 996–1025). For example, heterogeneity in age, team tenure, and prestige of alma mater was found to have a substantially stronger effect on top-management team tenure among Japanese subjects than among similar Americans. The cultural value of collectivism is pointed to as one possible explanatory variable. Members of collective societies may focus less on interpersonal differences within the group and more on member/non-member differences than members of individualistic societies, like the United States (Triandis 1988, 60–95). Where the majority falls on the collectivist/individualistic dimension may influence the gain from introducing ethnic minorities with collectivist or individualistic orientations. In the U.S. case, for example, some researchers speculate that the introduction of Asian American, Black American, and Hispanic American workers, who are typically more collectivist, might enhance group performance since majority-group Americans are characteristically competitive and individualistic (Cox, Lobel, and McLeod 1991, 840). It is not clear whether similar levels of racial/ethnic diversity would have the same effect in another country. Consequently, it is not clear whether we should include the findings from studies with non-U.S. subjects to develop lessons for American public administrators.

Perhaps it goes without saying that results for one diversity dimension or work outcome cannot be assumed to apply to other dimensions or outcomes, but some scholars and practitioners make the mistake of thinking they can. The lack of carryover was a pattern in our analysis of the literature. Not all dimensions of diversity appear to have the same effects. An outcome can be affected by one type of diversity but not another. Our finding is consistent with the 1991 research of Sackett, DuBois, and Noe, who conclude that findings regarding the effects of sex diversity on performance ratings were not generalizable to racial diversity (263–7). Other researchers also have made the point that findings regarding group diversity based on sex and personality are not transferable to culturally diverse groups (Watson, Kumar, and Michaelsen 1993, 598; Sackett, DuBois, and Noe 1991, 263–7).

Factors related to time are important in assessing research applicability—earlier findings may not be relevant to today's workplace. Certain types of individual differences may once have been influential in determining workplace relationships, but these differences may no longer be salient or may not provoke the same level of emotional or behavioral response. For example, employment barriers that were significant for certain ethnic groups in the United States in the mid-twentieth century are nonexistent as we begin the next century. Similarly, male subordinates of a female manager may have felt more uncomfortable in such relationships in the 1980s than they did in the 1990s. Research regarding attitudes toward different minority groups and how they change over time is sparse, suggesting that the observations reported in much of the empirical work we uncovered is out of date. Perhaps only research conducted in the last few years of the 1990s is relevant to current managing-for-diversity efforts (leaving only 35 relevant articles in our database for 1995–98, and 61 articles for 1990–98).

A second temporal factor affecting the utility of diversity research is the limited use of time-series studies. Longitudinal research is especially important in the area of managing for diversity because the processes of mutual accommodation and integration that are considered critical to effective diversity management take time to develop. There are only a handful of studies attempting to assess the consequences of diversity over time (Watson, Kumar, and Michaelsen 1998, 590–602). These studies suggest that initial observations are quite different from those obtained subsequently. For example, homogeneous groups may appear in the initial observations to operate with less conflict or be more efficient at problem solving, but subsequent observations may show that there are no differences between homogeneous and heterogeneous groups. If it is true that the consequences of diversity for small-group performance change over time, then research based on a single observation can be applied only to work groups sharing the same stage of development.

Other validity issues also call into question the utility of the studies we uncovered. Many of the studies failed to control for variables that other studies found to interact or intervene in the outcome–diversity dimension relationship. Some variables, such as type and frequency of the interaction of group members, may confound the existing findings if addressed. Also, some studies found interactions among the diversity dimensions that affected work outcomes. In addition, measurement of diversity dimensions and outcomes is inconsistent across studies, which raises methodological concerns and debates. Given the weaknesses in the body of research on diversity, we can draw no firm conclusions for public administrators. We cannot claim that diversity has any clear positive or negative effects on individual, group, or organizational outcomes.

Agenda for Public Management Scholars

It is not the nature of research activity to complement existing knowledge; rather, knowledge tends to fragment as new information identifies different relationships and sometimes contradicts what has previously been reported. New ideas and new directions for research tend to lure

researchers away from unresolved issues or concerns about a set of research findings. When research is allowed to pursue its own course, the result is likely to be a broad but shallow pool of knowledge. This is what has happened in the case of research applicable to managing for diversity.

Our review of the literature and analysis of the studies indicate that solutions to shortcomings in diversity research are not unlike those typically offered for enhancing the quality and reliability of any topic of social science research. We can point to four general recommendations that are particularly relevant for helping managing-for-diversity efforts. Additionally, there are unique insights and perspectives that scholars of public administration can—and, we argue, should—bring to research relevant to managing for diversity.

Because the consequences of diversity play out differently in work-related settings involving real stakes and human histories, one general recommendation is to put more emphasis on field research involving employed subjects and less use of student subjects and simulated experiments. Ideally, subjects would be drawn from public agencies, to reflect the types of interests, motivations, and experiences common to public-sector employees. Second, greater effort must be made to test the generalizability of findings from one diverse group to others, one type of workplace setting to others, and one culture to others. We need to know which findings are transferable in order to develop lessons for managers operating in a wide range of contexts. Third, because the benefits of diversity mature over time, there is a great need for more longitudinal research on group, team, or organizational performance within a diverse context and more focus on understanding the evolutionary processes of mutual accommodation and cooperation in diverse groups. Last, we need more emphasis on research about the way people perform complex tasks in a diverse context and the role of communication and other intervening variables in determining whether the effects of human diversity produce positive or negative results.

All diversity dimensions and outcomes need further study. An often-repeated reminder in knowledge-dissemination literature is that results of single research studies rarely motivate change or policy implementation. Programmatic efforts need to be taken to study "bundles" or "packages" of outcome areas or diversity types. Researchers may think of each finding as unique and self-standing, but adopters of new practices and policy makers do not—they look for confirmatory evidence. As Box (1994, 75–92) has noted, the issue of utility is particularly important in a field such as public administration research, where the value of a theoretical approach is appropriately judged by its ability to shape both understanding and action.

Public administration scholars are not doing as much as they could to guide managing-for-diversity efforts. If we had based our analysis on case studies, we may have found a greater contribution to managing-for-diversity research from public administration scholars than that derived from a focus on hypothesis-testing empirical research, but we would not know more about the validity of theoretical models and assumptions upon which managing-for-diversity efforts are based. Research is needed to test the basic assumptions of the approach and to provide practical lessons for public administrators contending with growing diversity in the labor pool on the one hand and increasingly diverse client populations on the other. Processes related to work performance as well as outcomes need to be examined in depth.

Scholars of the public sector have unique insights and perspectives to offer the field of diversity studies. There is much left to be done. As public administration scholars, we can call attention to important work outcomes with special relevance to the public sector, such as perceived equity, social justice, and citizen satisfaction. We need to address the dilemma between normative demands for democratic representation and the pragmatic recommendations of diversity research for managers. We can introduce new diversity dimensions to help guide group composition efforts, highlighting stakeholders ignored by traditional diversity measures such as members of minority political parties. We can test the generalizability of existing findings by replicating them in public-sector settings with public-sector employees. We might study whether state, local, and federal organizations offer more fertile fields for managing-for-diversity practices than those found in the private sector. We can test the value of various policies and practices associated with managing for diversity, such as conflict-management training and team-composition design. We can publish our work in venues that are accessible to public administrators. Ultimately, our engagement in diversity research can contribute to better knowledge of the processes and consequences of managing for diversity.

Notes

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