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# Affirmative Action

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## *Psychological Data and the Policy Debates*

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*The authors bring psychological research to bear on an examination of the policy of affirmative action. They argue that data from many studies reveal that affirmative action as a policy has more benefits than costs. Although the majority of pro-affirmative action arguments in the social sciences stress diversity, the authors' argument focuses on issues of merit. The merit-based argument, grounded in empirical studies, concludes that the policy of affirmative action conforms to the American ideal of fairness and is a necessary policy.*

Over the last decade, affirmative action has become an increasingly controversial policy within the United States. Proposition 209 (1996) in California and Initiative 200 (1998) in the state of Washington rendered preferential treatment based on demographic characteristics illegal, and both laws have been cast as anti-affirmative action measures (Chávez, 1998). Meanwhile, various federal district and appellate courts have rendered different, even conflicting, opinions about the legality of affirmative action plans at the University of Washington, the University of Texas, the University of Maryland, the University of Georgia, and, most recently and noticeably, the University of Michigan (Hebel, 2001). President Clinton undertook a major overhauling of affirmative action programs, especially as they operated in provisioning the government (Edley, 1996), and President George W. Bush has also implemented changes in the Office of Federal Contract Compliance Programs (OFCCP), the regulatory agency that oversees the implementation of affirmative action in business. Literally thousands of articles on affirmative action have appeared in the popular press in recent years arguing both for and against the policy (Crosby & Konrad, 2002).

Research psychologists have something to offer the debates. In 1995, the American Psychological Association (APA) waded into the discussion about affirmative action. Under the direction of the Public Interest Directorate, six psychologists assembled in Washington, DC, and presented a briefing to congressional staffers. The following year, APA (1996) published a pamphlet that grew out of the briefing, entitled *Who Benefits From Affirmative Action? The answer was, in a nutshell, everyone.*

One may worry that taking positions on controversial policies such as affirmative action will lead psychologists

out of the realm of impartial science and into the realm of public advocacy (Tetlock, 1994). The worry, we feel, is misplaced for two reasons. First, science can never be fully free of values (Bramel & Friend, 1981; Brief, 2000; Howard, 1985; Kendler, 1999; Mowday, 1997), perhaps especially when the laws of human behavior are applied to the laws of governance (Bell, 1980; Crenshaw, 1988; Freeman, 1978; Gotanda, 1991; Lawrence, 1987; Minnow, 1997; Post, 2000; P. J. Williams, 1991). As Konrad (in press) has noted, the decision to refrain from applying social science data to social problems is every bit as political as the decision to apply the data.

Second, as long as scientists' values are transparent and as long as accurate data are reliably reported, political psychology is not simply politicized psychology (Barrett & Morris, 1993; Fiske, Bersoff, Borgida, Deaux, & Heilman, 1991). No less important a scientist than B. F. Skinner (1953) noted that the methods of science should be applied to human behavior and that whatever one discovers about the regularities of human behavior can be applied to governmental or public affairs (Skinner, 1953, chapter 22). To muster an argument against or in favor of a social policy on the basis of systematically collected data is consistent with a venerable tradition in the law (Haney, 2002; Krieger, 1995, 1998; Rhode, 1990, 1995, 1996), in the social sciences generally (Barnett, 1994; Barry, 1997; Delgado, 1997; Goforth, 1992; Yoshino, 1998), and in psychology specifically (Bushman & Anderson, 2001; Suedfeld & Tet-

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lock, 1992). Recent expressions of the tradition include Haney and Zimbardo's (1998) plea to dismantle the system of maximum security prisons as well as Sackett and Wilk's (1994) treatise against inappropriate uses of testing. In March 2002, an entire issue of the *American Psychologist*, guest-edited by Nora S. Newcombe and Richard McCarty, was devoted to the topic "Interactions Among Scientists and Policymakers" (Newcombe & McCarty, 2002).

The purpose of our article is to discuss the costs and benefits of the American policy of affirmative action in education and employment. First, we describe affirmative action. A description of the policy is important because a lack of public education (Crosby & Cordova, 1996) has resulted in the average citizen being rather poorly informed about how affirmative action operates (Golden, Hinkle, & Crosby, 2001; Kravitz et al., 2000; Kravitz & Platania, 1993; Steeh & Krysan, 1996). Many debates on the topic founder on different, and often incorrect, construals of what the policy entails (Skedsvold & Mann, 1996). After delineating the policy, we consider arguments in favor of and against affirmative action, resting both sides on a bedrock of data collected by psychologists in a number of subdisciplines including educational, social, and organizational psychology. We conclude with a few words about the implications of the research for the implementation of successful affirmative action programs.

In the public debates about affirmative action, justification of the policy has rested on two planks: diversity and fairness (Tierney, 1997). Most educators who have entered the debates have stressed affirmative action's worth in terms of achieving diversity (Bowen & Bok, 1998). By focusing on diversity and ignoring issues of merit, the educators who advocate for affirmative action seem to talk past the public commentators who oppose the policy

(Wachtel, 1999). Much of the public opposition to affirmative action centers on the claim that some people (e.g., women, people of color) are obtaining rewards or opportunities that exist in short supply and that ought to be given to other people (e.g., men, White people) who are perceived to be more deserving of the rewards or better able to take advantage of the opportunities. Some of the most famous legal challenges to affirmative action programs in education—the *Bakke* case (*Regents of the University of California v. Bakke*, 1978), the *Hopwood* case (*Hopwood v. Texas*, 1996), and, more recently, the cases involving the University of Michigan (*Gratz v. Bollinger*, 2000; *Grutter v. Bollinger*, 2001; *Grutter v. Bollinger*, 2002)—have been seen by the media as contests of deservingness (Orfield, 1999). Programs in which a candidate of less apparent merit can achieve more than a candidate of more apparent merit seem to fly in the face of the American meritocratic ideal (Crosby, 2000a; Kuklinski et al., 1997). Focusing exclusively on diversity, the educators have ignored the issue of greatest relevance to critics: the issue of preference (Kendler, 2000).

Our article contributes to the debate over affirmative action by emphasizing merit. We argue that affirmative action is a policy that is entirely consistent with the American meritocratic ideal. We outline how affirmative action is superior in rewarding and promoting talent than the more passive policy of equal opportunity. Our argument about merit incorporates several observations. The first is that prejudices against people of color and against women persist in America today in, for example, the form of in-group bias. Even more obstructive than current prejudices, we argue, are the institutional barriers erected by the strong overt prejudices of the past. Additional problems such as stereotype threat and disengagement by minority groups have the consequence of depressed assessments—and thus, underutilization—of the true talents of the disadvantaged. The American legal system is built on the assumption that individuals can protest injustices that have resulted in the underappreciation of their talents. Yet, as will become clear, psychological research shows that most people are ill equipped even to notice persistent injustices unless they have access to systematic comparative data.

## **What Is Affirmative Action?**

Affirmative action has a formal definition. Affirmative action refers to "voluntary and mandatory efforts undertaken by federal, state, and local governments; private employers; and schools to combat discrimination and to promote equal opportunity in education and employment for all" (APA, 1996, p. 2). The goal of affirmative action is to "eliminate . . . discrimination against women and ethnic minorities, and to redress the effects of past discrimination" (Kravitz et al., 1997, p. vii).

Affirmative action has the goal of equal opportunity, but it differs from the policy of (passive) equal opportunity (Crosby, 1994; Holloway, 1989; Konrad & Linnehan, 1999). Equal opportunity policies seek to achieve a system where each individual is given the same treatment as any other individual. To this end, federal law prohibits all forms



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of intentional discrimination on the basis of race, gender, religion, and national origin (APA, 1996; Kravitz et al., 1997). With the policy of equal opportunity, it is assumed that when there is no overt discrimination, equal opportunity exists for members of all groups. Equal opportunity is thus a passive policy; action is taken only when there is evidence of explicit discrimination (Crosby & Cordova, 1996).

In contrast to equal opportunity, affirmative action is an active policy, calling for actions to ensure that equal opportunity actually exists. An underlying presupposition of affirmative action is that structural impediments to true equality do not always take the form of overt discrimination. Even policies that appear to be neutral with regard to ethnicity or gender can operate in ways that advantage individuals from one group over individuals from another group. Affirmative action thus involves proactive examination of whether equality of opportunity exists, and if it does not, a plan is implemented for taking concrete measures to eliminate the barriers and to establish true equality (Crosby & Cordova, 1996).

### **Affirmative Action in Employment**

Reskin (1998) outlined three sets of circumstances in which affirmative action is used by organizations: affirmative action required of federal contractors, court-ordered affirmative action, and voluntary affirmative action. Court-ordered affirmative action programs are rare compared with voluntary programs and contractor programs.

#### **Federal contractors and affirmative action.**

In 1965, President Johnson issued Executive Order 11246 (EO11246), creating the first full-fledged affirmative action policy (Holloway, 1989). EO11246 (and its subsequent amendments) applies to (a) the federal government and (b)

all private organizations that do business with the federal government (i.e., all federal contractors) and that have 50 or more employees and a federal contract of at least \$50,000 (U.S. Department of Labor, 2002). In 1995, three percent of American firms were covered by EO11246, but these were relatively large contractors, employing about 20% of the U.S. labor force (Reskin, 1998). As established in the Code of Federal Regulations (specifically 41 C.F.R. 60 [1965]), the OFCCP oversees the development and implementation of affirmative action plans (U.S. Department of Labor, 2002). The OFCCP has eight regional offices, each of which covers a number of district offices and field offices. In total, the OFCCP employs fewer than 800 people, which means that it does not have the resources for an abundance of intrusive regulatory investigations.

Affirmative action plans required by EO11246 have two different components. The first requires an organization to monitor its workforce statistics, paying attention to underrepresented gender and ethnic groups. With respect to gender, women constitute a target group. With respect to ethnicity, four groups are targeted: Blacks, Native Americans, Latinos/as, and Asian Americans. For every job category in its workforce, the contractor must determine the availability of qualified workers. Availability may be determined by considering factors such as the number of women and ethnic minorities who "have the requisite skills in an area in which a recruiter can reasonably recruit" (U.S. Department of Labor, 2002, p. 1). The contractor must also calculate its current workforce profile to determine whether incumbency matches availability. The Office of Management and Budget has estimated that an organization's affirmative action office needs about 180 working hours to develop an initial affirmative action plan (Truesdell, 2001). If the comparison of availability and incumbency reveals that qualified women or qualified people of color are underutilized in the organizations' workforce, then the second component of the affirmative action plan is implemented. This component involves elimination of discriminatory policies and the establishment of proactive measures to eliminate the discrepancy between availability and incumbency. The organization must establish flexible goals and realistic time lines for correcting the problem, and it must execute an action-oriented plan to achieve these goals (Crosby, in press, chapter 1).

Goals outlined in an affirmative action plan do not constitute quotas or unjustified preferential treatment. Supreme Court decisions have forbidden the use of strong preferential treatment (such as the keeping of separate lists of applicants) or strict quotas (Newman, 1989; Spann, 2000). The opponents of affirmative action (e.g., Connerly, 2000) often portray the policy as a simple matter of preferential treatment. They tend to see the policy as a monolith. Yet, when it comes to remedies for underrepresentation, a number of different strategies are common (Konrad & Linnehan, 1995a). Strategies include active recruitment of applicants from underrepresented groups, formalizing personnel practices such as job postings to ensure that members of all groups are aware of job opportunities, job



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training to ensure qualification for hires or promotions, and, in certain cases, giving additional weight to gender and race when making employment decisions (R. K. Robinson, Seydel, & Douglass, 1998; Turner & Pratkanis, 1994b).

The primary mechanism by which affirmative action operates is self-monitoring, but every year, a certain percentage of federal contractors are audited by the OFCCP. If a federal contractor fails to meet its own goals, little or no punitive action is taken by the OFCCP as long as the contractor can demonstrate a good-faith effort toward reaching the goals. If the contractor has no affirmative action plan, however, the OFCCP is likely to recommend debarment as a federal contractor, including termination of existing contracts, for a minimum period and until the company comes into compliance with the law. If the employer appears to be actively discriminating, the OFCCP may mandate recompense to the victims of discrimination.

Typically, about 3,500 to 5,000 compliance reviews are conducted each year, and \$30 million to \$40 million in back pay and other costs are recovered each year. A review of OFCCP actions between 1990 and 2001 shows that the number of violations has decreased since the early 1990s; otherwise, there is no consistent pattern in the number of evaluations conducted or the way in which they have been resolved (U.S. Department of Labor, 2002). In absolute terms, however, the number of severe problems is small. In 1995, for example, five organizations were debarred, and in some years, no organization is debarred (Truesdell, 2001, p. 283).

**Court-ordered affirmative action.** The 1972 Equal Employment Opportunity Act (an amendment to Title VII of the 1964 Civil Rights Act) empowers federal courts to include affirmative action among the kinds of relief they require of organizations found guilty of discrim-

ination (Reskin, 1998). Such affirmative action might include any of the aforementioned strategies, such as active recruitment and job training. Courts may also set proportions or targets for organizations that have been found to have blatantly discriminated. This is one of the exceptional circumstances in which quotas may be used to redress past discrimination (Reskin, 1998).

**Voluntary affirmative action.** Many organizations implement some form of affirmative action program even when they are not required to by EO11246 or by a court order. Voluntary affirmative action can include any of the strategies outlined above except quotas or preferential treatment (Reskin, 1998). A 1993 survey of 312 large firms in the New York–New Jersey–Connecticut metropolitan area, for example, found that 40% reported the use of affirmative action in recruiting ethnic minority job candidates, 28% used affirmative action to recruit female job candidates, 32% implemented affirmative action programs in promoting ethnic minority employees, and 24% used affirmative action in promoting female employees (Reskin, 1998).

**Affirmative action in procurements.** In 1953, the Small Business Act was passed. It inaugurated the policy of setting aside a percentage of government contracts for entities of specific categories (in this instance, small enterprises). Executive Order 11,458 (1969), signed by President Nixon, later identified minority-owned business as one type of small business and created the Office of Minority Business Enterprises. Both the Public Works Employment Act of 1977 and Public Law No. 95-507 (1978) authorized set-aside programs so that some procurement contracts would go to minority businesses (Thomas & Garrett, 1999).

In recent years, the constitutionality of set-asides has been challenged. As part of a massive review of affirmative action programs (Stephanopoulos & Edley, 1995), President Clinton eliminated set-aside procurement programs in the military and elsewhere. In a series of decisions ending with the famous *Adarand Constructors v. Peña* (1995) case, the U.S. Supreme Court has severely curtailed the operation of set-aside programs (see Crosby & VanDeVeer, 2000b, Part 4).

### **Affirmative Action in Education**

Affirmative action in education follows essentially the same practices as affirmative action in employment. As in employment, affirmative action in education is first a matter of good accounting. When monitoring (including self-monitoring) reveals problems, corrective action is taken.

Recently, affirmative action has become standard practice for elementary and secondary school districts around the country. One fascinating aspect of the No Child Left Behind Act of 2001 is that it requires schools to monitor their successes among different categories of students. Specifically, Section 441b(2)(G) of the No Child Left Behind Act states, “[Measurement and reporting shall] include information on special groups, including, whenever feasible information collected, cross tabulated, compared, and reported by race, ethnicity, socioeconomic status, gen-

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der, disability, and limited English proficiency” (U.S. Department of Education, 2002). Thus, without using the label affirmative action, the current federal administration has extended the kind of practices promoted by EO11246 to the business of operating public schools around the country.

Most of the attention to affirmative action in education focuses on college admissions. Educational institutions, such as colleges and universities, look at the pool of potential students to determine availability and count the proportion of women and ethnic minorities that are admitted and retained as students. When the figures are not aligned, the schools can take remedial action. Sometimes colleges and universities try to broaden their applicant pools. Colleges and universities may, for example, expand their recruitment strategies by visiting more inner-city high schools to encourage more ethnic minority students to apply. Sometimes colleges and universities focus on the selection process. The late Chancellor Tien of the University of California, Berkeley, noticed, for example, that the system of awarding extra points for good grades in advanced placement courses inadvertently disadvantaged students who were applying to the university from underfunded high schools that had few or no advanced placement courses. Once the problem was noticed, the University of California changed its admissions policy (granting admissions to the top four percent of graduates of every California high school) and instituted new programs (e.g., developing a set of online advanced placement courses) to correct the problem (Crosby, in press).

Affirmative action practices in higher education have been legally challenged on a number of occasions. In 1978, the Supreme Court of the United States handed down a complicated decision in the case of *Regents of the University of California v. Bakke*. The medical school at the

University of California, Davis, had been keeping two lists of applicants—one White and one minority—with 16% of the admissions spots reserved for minority applicants. When, two years in a row, several minority applicants were admitted to the medical school although they ranked lower on the paper ratings than did a rejected White applicant named Allan Bakke, Bakke sued the university. The trial judge found the university had violated the equal protection clause of the 14th Amendment to the Constitution, Title VI of the Civil Rights Act of 1964, and the California constitution. The California Superior Court confirmed the decision. So, in essence, did the U.S. Supreme Court. In a five-to-four vote, the Court declared the existing admissions policy impermissible and outlawed the use of explicit quotas or set-asides to bring about equal representation. The majority opinion, written by Justice Powell, did however explicitly allow schools to treat characteristics acquired at birth (e.g., the color of one’s skin) as “plus factors” when making selections among qualified candidates (Crosby, 2000b). Powell appended to the decision the admissions plan of Harvard University, which he praised for the way it considered race along with special talents, legacy status, region of residence, and other factors thought to help make up a good mix of students. Four of the justices concurred in part and dissented in part with the judgment written by Powell.

Subsequent to the *Bakke* case, no other decisions have been rendered by the U.S. Supreme Court on the topic of affirmative action in education (Spann, 2000). In contrast, at the appellate level, several cases have been decided in recent years. In March 1996, the Fifth Circuit Court of Appeals decided that the admissions plan for the University of Texas Law School was tantamount to the kind declared unlawful in *Bakke* (*Hopwood v. Texas*, 1996). Four years later, the Ninth Circuit Court of Appeals upheld the constitutionality of the admissions plan of the University of Washington Law School but admitted that Proposition 200 prohibited the plan from being administered (*Smith v. University of Washington Law School*, 2000). The following year, the Eleventh Circuit Court of Appeals ruled that the University of Georgia had violated the Constitution in its admissions plan (*Johnson v. Board of Regents of University of Georgia*, 2001).

Currently, many legal scholars and educators have their attention trained on cases involving the University of Michigan. In the late 1990s, two White applicants (Jennifer Gratz and Patrick Hamacher) to the College of Literature, Science, and Arts and one White applicant (Barbara Grutter) to the Law School filed suits against the University of Michigan. Having been denied admission while ethnic minority candidates with lesser paper credentials were admitted, the plaintiffs charged both constitutional and statutory violations. At the federal district court level, the case concerning undergraduate admissions (*Gratz v. Bollinger*, 2000) was decided in favor of the university by Judge Patrick Duggan while the law school case (*Grutter v. Bollinger*, 2001) was decided against the university. Both cases were appealed. In a rare move, on December 6, 2001, the Sixth Circuit Court of Appeals heard oral arguments for

both cases at the same time. The appellate court has now ruled on one of the cases, *Grutter v. Bollinger* (2002), and has reversed the district court decision. Applying the standard of strict scrutiny that is required whenever racial characteristics are involved, the appellate court found that the admissions policy passed constitutional muster because it was narrowly tailored (with many aspects of each individual dossier going into making a composite score) and because it served a compelling state interest (the promotion of diversity in the profession of law). The Sixth Circuit has not rendered a decision in the case of *Gratz v. Bollinger*. Meanwhile, lawyers representing Grutter, including those from the Center for Individual Rights, filed a petition for review with the U.S. Supreme Court (P. Schmidt, 2002), and the Court has agreed to hear the case.

## Building the Arguments for Affirmative Action

### Diversity Argument

Many proponents of affirmative action frame their support of the policy in terms of diversity. Because diversity was identified as a compelling state interest in the famous *Bakke* case, educators have focused on diversity, rather than merit, in the hopes that their arguments will thereby pass constitutional muster (Downing et al., 2002). Some advocates for affirmative action in the marketplace have followed suit.

The diversity argument contains two components. First, it proposes that affirmative action increases diversity in those included in the marketplace and schools. Second, it proposes that diversity is beneficial. Both propositions are subject to empirical validation. A substantial literature confirms the link between affirmative action policies and increased diversity of representation. A much smaller literature suggests that diversity—which may or may not be valued simply in its own right—also confers benefits in the workplace and at school.

**Affirmative action and diversity in the workplace.** Does affirmative action increase diversity in the workplace? By increasing the number of women and of people of color in the marketplace, affirmative action helps increase diversity. There is strong evidence produced mostly by economists that affirmative action has, indeed, been very effective at increasing the numbers of women and of people of color hired into jobs at all levels. Several studies have shown that people of color (Badgett, 1999; Konrad & Linnehan, 1999) and women (Blank, 1985) constitute a greater percentage of the public (i.e., governmental) workforce than of the private workforce and that they advance further in the former than in the latter (Badgett, 1999; Konrad & Pfeffer, 1991; S. P. Smith, 1976). The federal government, with its approximately three million employees, is, of course, the single largest affirmative action employer. Other studies have generally shown that federal contractors have hired more women and more people of color than other employers of similar size in the same sectors of the economy (Ashenfelter & Heckman, 1976; J. J. Heckman & Payner, 1989; J. L. Heckman

& Wolpin, 1976; Herring & Collins, 1995; Holzer & Neumark, 1999; Konrad & Linnehan, 1995b; Leonard, 1984a, 1984b, 1986, 1989, 1990, 1994; Rodgers & Spriggs, 1996; for reviews, see Crosby, in press, chapter 3; Reskin, 1998) and, again, that federal contractors have granted more promotions to people of color and women than comparison firms without affirmative action (Herring & Collins, 1995). Both quantitative (T. S. Fine, 1992; “Gallup Short Subjects,” 1995; Parker, Baltes, & Christiansen, 1997; M. C. Taylor, 1994) and qualitative (Ayers, 1992; Simpson, 1996) studies have shown that the direct beneficiaries of affirmative action recognize that the policy has been effective, credit the policy with having provided them with opportunities, and enjoy working for affirmative action employers.

Does increased diversity bring benefits to work organizations? Here, the hard data are less numerous. One extensive and careful study has unequivocally shown that firms that aggressively pursue affirmative action in hiring perform as well as other firms economically (Holzer & Neumark, 2000). Some studies (“Equal Opportunity Pays,” 1993; Wright, Ferris, Hiller, & Kroll, 1995) have tracked the positive effect of being publicly recognized as a good affirmative action employer on stock prices, and still other studies have linked affirmative action to increased return on stocks (Bellinger & Hillman, 2000; Federal Glass Ceiling Commission, 1995).

Diversity has been thought to bring economic advantage in two ways. First, a diverse workforce introduces varied points of view (Reskin, 1998), thus increasing a firm’s ability to respond to challenges and problems. A. G. Lafley, chief executive officer of Procter & Gamble, has attested to management’s faith in the importance of workplace diversity:

All the data I’ve seen in 30 years of being in business—and all of my personal experience at P & G over the last 23 years—convince me that a diverse organization will out-think, out-innovate, and out-perform a homogeneous organization every single time. (Steelcase, Inc., et al., 2000, p. 6)

Scattered laboratory studies have shown that diversity allows for a variety of perspectives to be presented, which enhances the potential for creative problem solving (Milliken & Martins, 1996). Researchers have found that, over time, students in ethnically diverse workgroups generated a greater range (Watson, Kumar, & Michaelsen, 1993) or a higher quality (McLeod, Lobel, & Cox, 1996) of ideas compared with more homogeneous groups.

The second way that diversity efforts are thought to benefit firms is by helping them to market products and services to previously underserved populations (Reskin, 1998). Employees from underrepresented groups can provide valuable insights and information that can help firms successfully reach out to more diverse groups. 3M, a multi-billion-dollar manufacturing and technology firm, has made this very argument:

3M has found that bringing together the collective talents and experiences of a diverse group of employees is necessary to develop creative approaches to problem-solving, and to success-

fully market and sell its products to a wide range of communities. Time after time, 3M has found that input from employees who are members of the communities to which 3M markets and sells its products is crucial to ensuring that it can reach those communities in the most effective way. (Steelcase, Inc., et al., 2000, p. 4)

Broadening a firm's market is a direct way to increase its profitability (see Reskin, 1998). According to a report by the Federal Glass Ceiling Commission, a Miami, Florida, car dealership that hired bilingual sales staff and held special events targeting a Hispanic clientele saw sales increase by 400% over a six-year period and thereafter held 50% of the Hispanic market (Crosby & Herzberger, 1996).

Although diversity may be beneficial to organizations, difficult issues can also arise. In a literature review of diversity in groups, K. Y. Williams and O'Reilly (1998) found that diverse workplaces should be supervised carefully to obtain the advantages that diversity has to offer. That is, when a workplace is not managed well, prejudice, discrimination, and in-group bias can harm productivity, performance, and working relationships. Furthermore, Linnehan and Konrad (1999) warned against organizations hiring persons from underrepresented groups for racialized positions whereby they represent the company to their community. This type of hiring can threaten, rather than advance, the careers of those hired for such purposes (Collins, 1993). Finally, some studies have suggested that the benefits diversity can offer the workplace depend on the goals an organization wishes to pursue (Richard, 2000).

**The benefits of diversity in higher education.** As with industry, so with education: Students of affirmative action must ask whether the policy has increased the numbers of minority students in colleges and universities and, if so, whether the increased diversity has been beneficial to students and their educational institutions. Again, the data clearly demonstrate that affirmative action has increased diversity of student bodies in higher education (Bowen & Bok, 1998). Somewhat less overwhelming, but still persuasive, are data on the benefits of diversity in higher education to students, institutions, and society.

Four main benefits of diversity have been identified in institutions of higher education. First, heterogeneous learning environments benefit students' learning more so than do homogeneous environments. Universities with diverse student populations expose individual students (particularly members of majority groups) to new perspectives and provide the basis for interactions with people of different backgrounds. Confronted with new ideas and beliefs, students engage in deeper and more complex learning rather than automatic learning. Gurin, Dey, Hurtado, and Gurin (2002) analyzed data collected from over 10,000 students at different colleges and universities to test the educational benefits of diversity. Gurin et al.'s analyses showed that students who experience the most racial diversity in the classroom and in informal interactions demonstrate the greatest growth in intellectual motivation and engagement and in academic skills. The educational benefits of diversity thus help fulfill higher education's mission to advance learning.

A second benefit of diversity in higher education is that it prepares students for future interactions in an American society that is becoming increasingly diverse. The U.S. Census Bureau has estimated that by the year 2050, non-Hispanic Whites will account for only 52.8% of the United States population (U.S. Census Bureau, 2000). According to Gurin et al. (2002), students "need to learn how to accept diversity, negotiate conflicts, and form coalitions with individuals and groups if they are to become prepared to be leaders in an increasingly heterogeneous and complex society" (p. 3). Gurin et al.'s analyses of data from University of Michigan students revealed that experiences with diversity led to students being open to learning about different backgrounds and to understanding that group differences are compatible with a sense of community generally. Gurin et al. suggested that students who are exposed to diverse peers are better equipped for an increasingly diverse society.

Attending a university with a diverse student body not only gives students the ability to interact effectively with people of different backgrounds but also increases the likelihood of intergroup interaction (Gurin, 1999; Gurin, Nagda, & Lopez, in press). Thus, a third benefit of diversity in higher education is that students who are exposed to diversity are motivated after graduation to seek out more integrated communities than they would have otherwise done. Gurin (1999) found that experiences with diversity during college significantly predicted the extent to which students had cross-racial interactions five years after graduation. This finding is even more remarkable when one considers the fact that most students do not live in racially diverse neighborhoods or attend diverse schools (Orfield, Bachmeier, James, & Eitle, 1997). Thus, diversity in the college environment can play a significant role in bringing about more racial integration in American society.

A last benefit of diversity in higher education is its role in bringing about social stability in larger American society. In their 1998 book, *The Shape of the River: Long-Term Consequences of Considering Race in College and University Admissions*, Bowen and Bok (1998) looked at records from more than 80,000 students who had matriculated at 28 highly competitive colleges and universities in 1951, 1976, and 1989. Among the students were some ethnic minority students who were "special admits" under an affirmative action program. Bowen and Bok contrasted the educational and professional lives of the special admits and of other students. The data analyses showed that the special admits graduated from college, attended and graduated from professional and graduate schools, and held professional jobs at the same rate as did the other students. The special admits did, however, differ from the other students in two salient ways. First, they had lower grade point averages than did the comparison groups both during their undergraduate education and during their professional or graduate training. Second, decades after graduation, those who were special admits were more likely than their White counterparts to be active civic leaders. Noting that a strong democracy relies on educated people to serve as civic leaders, Bowen and Bok concluded that social stabil-

ity is enhanced by educating citizens from diverse backgrounds. Smaller, more focused studies of affirmative action in professional schools have shown that Black and Latino graduates of medical school are more likely than their White counterparts to serve underserved populations (Fryer et al., 2001; Komaromy et al., 1996; Penn, Russell, & Simon, 1986).

In sum, affirmative action is a policy that helps create and maintain diverse workforces and student bodies. Some empirical evidence has shown that students can benefit from being in diverse groups. Research has also demonstrated the utility of diversity in a business setting, so long as diversity is handled in an appropriate manner.

### **Merit Argument**

An endorsement of diversity does not mean that people find acceptable any means of achieving it. Many of the opponents of affirmative action support the concept of diversity but argue that impartial treatment of all people, without regard to their gender or ethnicity, is the best way to achieve true diversity in any organization (Tomasson, 1996). When diversity is achieved at the expense of justice, everyone suffers.

Opponents of affirmative action often characterize the policy as a violation of a basic principle of justice. Treating everyone in the same impartial fashion is a core aspect of fairness. Should one not hire, retain, and promote workers on the basis of their work, without consideration of their ethnicity or gender? Should one not admit students on the basis of their demonstrated academic abilities and achievements, without consideration of their ethnicity or gender? Should one not judge people on the content of their character, not the color of their skin (S. Steele, 1990)?

Opponents of affirmative action point to the strong national support for their conceptualizations. One survey of 1,004 students on a number of college campuses, underwritten by a conservative group in New York, found that 79% of the respondents thought that any lowering of standards for some applicants was unfair to all. The negative feeling about ethnic preferences was in contrast to the positive feeling, among the same sample, toward diversity. Eight-four percent of the students supported college efforts at diversity (Gose, 2000).

The proponents of affirmative action reply that the policy helps, not hinders, the equal treatment of all people (Bergmann, 1996). Without affirmative action, say the advocates, most groups in the United States do not receive treatment equal to the preferential treatment currently afforded White men. Some of the unequal treatment derives from current prejudices and in-group favoritism. Some of the unequal treatment occurs in the absence of either overt or covert prejudice, as a consequence of structural inequalities. Institutional racism and sexism continue as powerful determinants of people's lives and can be dismantled only through planned and proactive measures.

**Anticipating the merit argument: An overview.** Our argument takes a similar form. Specifically, we contend that all measures of merit include an element of subjectivity and that they are, therefore, influenced by both

historical and current prejudice. We also see that psychological factors such as stereotype threat influence how members of target groups perform, causing some tests to underestimate their actual merit. On the basis of numerous social psychological studies, we claim that members of the target groups cannot be relied on to come forward themselves and that other, fair-minded people are usually unable to detect unfairness in the absence of aggregate data. The implication is that affirmative action, with its reliance on the analysis of systematic aggregate data, is needed if fairness is to be achieved by rewarding and utilizing merit, regardless of gender or ethnicity.

**Measuring the merit of individuals.** Any claim about relative amounts of merit presupposes that there is a way to measure merit. Given what is known about the level of sexism and racism still present in the United States (Bergmann, 1996; Reskin, 1998) and what is known about how even well-intentioned fair-minded people have difficulty suppressing bias (Devine, 1989; Devine, Monteith, Zuwerink, & Elliot, 1991; Fiske, 1998), it would seem foolish to rely on subjective measures to assess merit. Standardized tests surely seem the way to go.

Yet reliance on standardized, so-called objective tests rather than subjective impressions is no guarantee that fairness will be achieved. Even when tests are equally reliable for different groups, as indeed most contemporary tests of mental functioning are (Jensen, 1980), and even when they have the same predictive validity for different groups, as indeed many tests do (Valencia & Suzuki, 2000), a problem arises "whenever the standardized racial [ethnic, or gender] gap in job [or school] performance is smaller than the standardized gap in test performance" (Jencks, 1998, p. 477). That problem is called selective system bias.

The SAT I exams offer an interesting case in point. Black and Latino students, as well as some Asian American students (e.g., Cambodian, Filipino), typically score much worse on the SAT I exams than do White students, but they typically achieve college grades that are only slightly worse than Whites and typically graduate from college at only slightly lower rates than Whites. Given that the SAT I scores predict only a small percentage of the variance in college performance, is it really fair to use the tests as a gating mechanism? Or is it the case, as Jencks and Phillips (1998) asserted, that reliance on them "forces Blacks to pay for the fact that social scientists have unusually good measures of a trait on which Blacks are unusually disadvantaged" (pp. 14–15)? To make matters worse, it has now been documented with massive data sets from the University of California that SAT I scores lose any ability to predict freshman year grades if the regression analyses control for socioeconomic status (Fernald, 2002; Greiser & Studley, 2001).

The testing community has been quite willing to acknowledge the difficulty of assessing how well individuals have met given standards or even of knowing which standards are relevant to performance within given domains (D. C. Brown, 1994; Cicchetti, 1994; J. K. Ford, Kraiger, & Schechtman, 1986; Gutman, 1993; Hunter & Schmidt,

1976; F. L. Schmidt, 1988, 1991; Tett, Jackson, & Rothstein, 1991). Not only have researchers in the testing community been concerned to develop tests that are culturally fair (Adams, 2000; Nelson, 2000; Reynolds, 2000; Suzuki & Kugler, 1995), they have also been forthright about the thorny problems of selective system bias (Jencks & Phillips, 1998) and of predictive or criterion validity (Hartigan & Wigdor, 1989; Hattrup, Rock, & Scalia, 1997). As Kane (1998) pointed out, “alternate approaches to a standard setting cannot be evaluated [only] in terms of their accuracy, because the standard does not exist until we set it” (p. 129). Clearly, how any test is constructed determines what differences will be found among groups. It is also clear that preconceptions about group differences determine how one constructs the test (Helms, 1995).

In contrast to the sophisticated debates among members of the testing community, most of the criticism of affirmative action has assumed that standardized tests are unproblematic. The uproar that arises over the admission of minority applicants into programs when rejected White applicants have higher test scores (see, e.g., Blum & Levin, 2000; Eastland, 1996; Orleans, 1992) seems to assume that the test scores are an unassailable indicator of true merit. Those who bemoan what they see as reverse discrimination often avoid or ignore questions about the choice of predictive gatekeeping tests, about how those tests are initially validated, and about the algorithms used to combine scores on different tests.

**Current prejudice.** Most Americans do not like to think of themselves as prejudiced. Yet many Americans hold prejudicial stereotypes about women and about people of color. Some of the prejudices appear very deeply rooted. Even after 30 years of women’s liberation, negative feelings exist toward employed women. Heilman, Block, and Martell (1995), for example, surveyed 224 male managers and found that they characterized female managers more negatively than they did male managers. Nor is antifemale hostility the only form of prejudice. Many “benevolent sexists” assume that women are unsuited to the rough and tumble world of high-status jobs (see, e.g., Fiske et al., 1991; Heilman et al., 1995; Rudman & Glick, 1999). Sex stereotypes are not held only by men. As Rudman and Kilianski (2000) have recently demonstrated, women may show less overt gender prejudice than men, but their implicit beliefs about the connections between gender and status are similar. A recent review by Lueptow, Garovich-Szabo, and Lueptow (2001) finds that sex stereotyping has been relatively stable over the past 25 years. Sex-role stereotypes may be most harmful to women seeking leadership positions (Eagly & Karau, 2002).

Equally tenacious are racial or ethnic prejudices (Dasgupta, McGhee, Greenwald, & Banaji, 2000). A recent study by Frazer and Wiersma (2001) illustrated how even presumably well-intentioned Whites cannot suppress their racial schemas. In an experimental setting, White undergraduates were equally likely to hire a Black or a White job applicant; however, a week later, they recalled the interview responses of the Black applicant as having been significantly less intelligent than those of the White appli-

cant—despite the fact that the actual responses were identical.

Sexist and racist prejudices can, and often do, result in discriminatory behavior. Several surveys have found that women routinely encounter sex discrimination (B. Lott, Asquith, & Doyon, 2001; Swim, Hyers, Cohen, & Ferguson, 2001) especially when applying for jobs in nontraditional rather than traditional careers (see, e.g., Heilman, Block, & Lucas, 1992; Jackson, Esses, & Burris, 2001). Women earn about 70% of what men earn, adjusting for hours worked, and only a portion of the difference can be explained in terms of human capital (Crosby & Cordova, 1996). Disadvantages also persist for members of minority groups. A study by the Fair Employment Council of Greater Washington, for example, found that White job applicants were treated significantly better than Black applicants in almost 25% of job searches (Crosby & Herzberger, 1996). A number of studies have demonstrated that people of color face restricted access to professional jobs that are more open to White people with the same qualifications (Reskin, 1998).

Both prejudices and the discriminatory behaviors that result from them can lie outside conscious awareness. Indeed, as Dovidio and Gaertner (1996, 2000; Gaertner et al., 1999; Hodson, Dovidio, & Gaertner, 2002) have argued, most White Americans hold values such as fairness, equality, and open-mindedness that are antithetical to seeing themselves as racially biased. Most White Americans, certainly those who are educated, no longer express old-fashioned forms of racial bigotry. Yet a more subtle prejudice, termed “aversive racism” by Dovidio and Gaertner (2000), persists among many White Americans. When circumstances provide aversive racists with plausible excuses for derogating or excluding out-group members, they avail themselves of the opportunity—and do so without reflection or awareness.

Dovidio and Gaertner (2000) conducted a temporal study of racial attitudes and biases in rating the qualifications of a Black or White job candidate among White college students. The first set of data was collected in 1988–1989; the second set, 10 years later. Although self-reported prejudice dropped from Time 1 to Time 2, a bias against a Black candidate whose qualifications were ambiguous persisted; this bias was not moderated by time of testing. Although the White participants generally refused to admit that they saw Blacks as inferior to Whites, they consistently rated White targets more favorably than Black ones.

Understanding the dynamics of prejudice and discrimination is essential if one is to assess the need for policies such as affirmative action. The majority of Americans today know that ethnicity and gender influence people’s life chances in this country (“Gallup Short Subjects,” 1995). The more educated a person, the more likely she or he is to acknowledge race and gender discrimination (Staples, 1998). The majority of citizens may not realize that prejudice can persist in covert forms, yet research psychologists have demonstrated the persistence of crippling stereotypes even in the absence of conscious antipathies

(Dovidio & Gaertner, 2000; Greenwald & Banaji, 1995). If they have internalized the stereotypes, even well-intentioned women and men will be unable to suppress the bias because of cognitive distortions that are dissipating only slowly.

**Institutional barriers.** Distinct from discriminatory treatment resulting from overt or covert prejudice is discriminatory treatment that occurs without malice or stereotypes (Kahn & Crosby, 1985). American law differentiates between disparate treatment and disparate impact. Sometimes, practices appear to treat everyone the same, but because of causal links that may have been obscure when the practices were inaugurated, the practices end up disadvantaging people from one group more than people from another. Social scientists often conceptualize factors that create disparate impact as parts of institutional discrimination (Krieger, 1995, 1998).

An example based on the 1971 *Griggs et al. v. Duke Power Co.* case illustrates the operation of disparate impact (Crosby & VanDeVeer, 2000a). Assume that a manufacturing company, wanting to hire competent workers, administers a series of tests to all applicants. Assume further that one of the tests measures reading comprehension at a 12th grade level. If the company is located in an area where Black citizens are much less likely to have completed high school than are White citizens, the test would produce a disparate impact on Blacks and Whites. If it were discovered that the jobs in question really required only a 6th grade reading level, the practice would be deemed illegal and would be changed.

Many aspects of today's institutional discrimination result from the prejudices and preconceptions of yesterday, prejudices that may no longer be held. To illustrate the point, we adapt an example presented by Sackett and Wilk (1994) in their analysis of testing for employment purposes. Suppose an organization wishes to screen employees on the dimension of conscientiousness and on many other traits. To keep the preemployment test suitably short, the organization decides to use a single question to assess conscientiousness. It justifies its testing strategy by referring to the famous finding that a response to the single item "Did you ever build a model airplane that flew?" predicted pilot success in flight training as well as did an extensive battery of tests (Henry, 1965; Sackett & Wilk, 1994, p. 939). Now suppose that the organization's single-item measure of conscientiousness asks respondents if, as adolescents, they had saved money earned from baby-sitting. To its surprise, the company finds it has eliminated many more male than female applicants. A year later, the organization revises the test and changes the measure to ask respondents if, as adolescents, they had saved money earned from mowing the lawn. This time more women are eliminated from the applicant pool than men. The point of our example is not whether women or men are more conscientious. The point is that a current test, applied by unprejudiced people, could produce differential results if a prejudiced person had constructed it. Assume that a misogynist had constructed the test and had framed the item about conscientiousness and many other items with the

ideal male respondent in mind (asking about lawn mowing and not about baby-sitting). Long after the retirement of the misogynist, the effects of his or her prejudice could prove discriminatory.

Once one is alerted to the kinds of subtle biasing mechanisms seen in Sackett and Wilk's (1994) vivid example, it is not hard to find bias in many places. Consider, for example, admissions to law school (Wightman, 1998). Most accredited law schools in the United States primarily base admission on two factors: LSAT scores, which usually are weighted about 60%, and the undergraduate grade point average, which is usually weighted about 40%. Women do significantly worse on the LSATs than men, but women generally have better grade point averages as undergraduates. By overweighting LSAT scores relative to grades, the admissions officers may be unintentionally disadvantaging women. The vestiges of an old system, in which women were thought to be unsuited to the law, continue to have repercussions today.

Tests that unintentionally discriminate against classes of people can also operate through simple lack of attention to ways in which the newcomers do not fit the existing mold. Several years ago, for example, when Congress held hearings about the advisability of allowing women to pilot fighter aircraft, evidence that appeared to show that women regain consciousness after a plunge through space less quickly than men do was introduced into the hearings. The evidence had been produced by the apparently objective means of spinning individual women and men, wearing antigravity suits, in a simulation machine and measuring the time (in milliseconds) that they required to regain consciousness after a simulated loss of altitude. Well into the testimony, it was revealed that the antigravity suits worn by the women had been made for men, not women. Thus, for instance, a 5' 10" woman who was tested wore an antigravitational suit made for a 5' 10" man. Antigravitational suits help people regain consciousness through the use of pressure on the leg. As the average woman has longer legs than the average man of the same height, the antigravitational suits literally fit the women less well than they fit the men. The apparently slower recovery time of women turned out to be the fault of the suits, not the fault of the women, but until an advocate for women pilots pointed out the details of suit design, the numbers appeared to be objective data (Crosby, 1996).

One effective way to detect test bias and to eliminate the current discriminatory effects of past prejudices is to monitor whether current practices produce disparate impacts. When there is a mismatch between availability (applicants) and incumbency (successful candidates), disparate impact is demonstrated. If disparate impact is found, a close examination of the reasons for it may reveal such causal factors as flawed tests.

Without the kind of monitoring that is the core practice of affirmative action, people may lack the authority and the resources to ferret out the reasons for differential outcomes among groups. They may also lack the motivation to find discrimination and indeed may be motivated to perceive the world as a just place (Lerner, 1980). Especially if

convenient explanations exist for why groups might be performing differently, the analysis of institutional discrimination may be aborted. Stereotypes about the genders or about people of different ethnicities typically provide explanations that do not threaten the status quo and that permit people to retain their view of the worlds in which they live as fair and predictable (Hafer, 2000).

**Stereotype threat.** A growing literature in social psychology has recently revealed another source of differential outcomes not directly attributable to current prejudices: stereotype threat. (C. M. Steele, 1997; C. M. Steele & Aronson, 1995). The concept of stereotype threat proposes that a person merely has to know that he or she is a target of a negative stereotype for it to have an effect, even in the absence of any prejudiced behavior on the part of a member of the hegemonic group. In a prototypical example, a Black student is aware that there is a negative stereotype about his or her academic abilities. This awareness leads to lower academic performance by the student.

How does one know that poor performance results from the student's awareness of the stereotype, rather than from genuinely lower abilities? The answer lies in the experimental design. Students have been matched on the basis of ability beforehand, and when the Black student has been told that the stereotype does not apply in this situation (e.g., that Black and White students perform equally well on a particular test), his or her performance has been equivalent to that of the White student (C. M. Steele, 1997).

Several investigators are focusing on the mechanisms through which stereotype threat may have its effect. A recent study by D. M. Quinn and Spencer (2001), for example, provided evidence for the role of anxiety by showing that stereotype threat disrupted cognitive processing. Women in a high-stereotype-threat condition not only performed less well on a math test than men or than women in a low-threat condition but also were more likely to say they could not formulate a strategy to solve the problems.

**Disengagement.** Stereotypes may also lead the stereotyped individual to psychologically disengage from the domain in which the stereotype exists. Such disengagement may be adaptive in that it protects against threats to self-esteem (see, e.g., Crocker & Quinn, 1998). The problem is that disengagement has a negative effect on achievement by reducing individuals' desire to improve their performance as well as their ability to use feedback from others to do so. Brenda Major and colleagues have studied this process in Black college students. They argued that, although disengagement may consist both of devaluing the domain and of discounting feedback received in that domain, it is the latter process that most affects ethnic minority students. They have found evidence that Blacks are less affected than Whites by feedback (positive or negative) on intelligence tests and that this disengagement is both chronic and situationally activated (Crocker, Voelkl, Testa, & Major, 1991; Major, Spencer, Schmader, Wolfe, & Crocker, 1998; Schmader, Major, & Gramzow, 2001). Their research showed further that there is a significant relationship between perceived injustice against one's ethnic group and the tendency to discount academic feedback

for both Blacks and Latinos/as, but not for Whites (Schmader et al. 2001).

Disengagement, like stereotype threat, is part of a vicious cycle. Stigmatized individuals protect self-esteem by opting out of the dominant reward system. Their ensuing underperformance then provides a further rationalization for their continued derogation by the dominant group.

### **Equal Opportunity Versus Affirmative Action**

Even if one admits that discrimination, especially institutional discrimination, persists in the United States, one may not be ready to embrace affirmative action as the most appropriate antidote. Indeed, in the minds of many Americans equal opportunity is far preferable to affirmative action (Kravitz et al., 1997) because equal opportunity, unlike affirmative action, cannot be construed as reverse discrimination.

**Perceiving one's own disadvantage.** Central to American jurisprudence is the concept that individuals may seek redress when they feel they have been wronged. If it turns out that employers or educators are not providing equal opportunities or equal rewards, the wronged party can seek redress. Employees can sue their employers. Purchasers can sue those who sell them merchandise. People who have entered into contractual arrangements can sue each other.

The question then arises: Why is affirmative action needed when victims have the right to protest violations of fairness? One reason is economic. Affirmative action is a good way for organizations to avoid lawsuits (Truesdell, 2001). Studies by economists have shown the costs to individuals and organizations when court cases are brought. Each year, over 60,000 complaints are filed with the Equal Employment Opportunity Commission, but only 500 of them are brought to trial (Bergmann, 1996). Waging a discrimination case can consume three years and many thousands of dollars from the plaintiff and can cost the defending organization much more than that in legal fees and fines (Crangle, 2001).

There is another reason, more psychological than economic, for why one should not rely exclusively on a reactive legal system. Victims may initially shy away from confrontations. Many victims do not bring a complaint because of lack of resources or fear of retaliation. Many victims decide that they would rather suffer some injustice than risk major injustices that might come with retaliation (M. Fine & Barreras, 2001). Victims probably sense intuitively what researchers have documented experimentally: Complainers are further derogated (Kaiser & Miller, 2001).

Not only are victims unlikely to bring their grievances to the awareness of those with the power to correct them, they are often unlikely to allow the grievances to enter into their own consciousness. Protests are not likely if the wronged party has little awareness of being wronged. It is hard to correct a problem if the problem goes unrecognized.

A substantial literature in social psychology has shown that whereas members of historically disadvantaged groups have little trouble recognizing categorical unfair-

ness at the group level, they tend not to see themselves as personally disadvantaged. Crosby (1984) was the first to document this phenomenon, terming it the “denial of personal discrimination” (p. 371; see also Crosby, 1982). In a 1978 study of employed women, employed men, and housewives in Newton, Massachusetts (discussed in Crosby, 1982, 1984), Crosby asked respondents in detail about their feelings of satisfaction with their own working situations, with their home lives, and with the working situation of employed women in general. The employed women were, by objective measures, the victims of salary discrimination, but they expressed no more dissatisfaction about their personal situations than did the men. The women did, however, recognize the disadvantages faced by working women in general. It seemed as if each woman saw herself as the one lucky exception to the general rule of sex discrimination.

A number of studies have shown that denial is not absolute. Although members of disadvantaged groups have imperfect awareness of their own personal disadvantage, they do recognize some level of personal disadvantage (see, e.g., Dion, 1975; D. M. Taylor, Wright, Moghaddam, & Lalonde, 1990). In light of this finding, D. M. Taylor et al. (1990) proposed that the term *personal/group discrimination discrepancy* (P/GDD) would be more accurate than denial of personal discrimination. A recent laboratory study (Operario & Fiske, 2001) has provided support for the P/GDD phenomenon, showing that Black students are more likely than White students to claim to be personal victims of discrimination. Thus, the victims of discrimination may simultaneously know that they are more disadvantaged than members of the hegemonic group and believe that they are less disadvantaged than other members of the lower status group.

Whether one uses the term P/GDD or denial, the phenomenon has proven to be robust (Crosby, in press, chapter 1; Dion, 1986). Less awareness of personal than of group disadvantage has been documented among Canadian working women (Hafer & Olson, 1993), ethnic minority residents of the Toronto area (Dion & Kawakami, 1996), linguistic minorities in Quebec (D. M. Taylor, Wong-Rieger, McKirnan, & Bercusson, 1982), inner-city Blacks in Miami (D. M. Taylor, Wright, & Porter, 1994), immigrants (D. M. Taylor et al., 1990), Black MBAs (D. L. Ford, 1988), undergraduate students (Foster & Matheson, 1995; Moghaddam, Stolkin, & Hutcheson, 1997; Operario & Fiske, 2001), a national probability sample of Black and White workers (Lewis, 2002), welfare mothers (Olson, Roese, Meen, & Robertson, 1995), and gays and lesbians (Birt & Dion, 1987; Crosby, Pufall, Snyder, O’Connell, & Whalen, 1989).

People’s proclivity to see themselves as less subject to discrimination than their reference group is consistent with the observation that people—or at least Westerners (cf. Norenzayan & Nisbett, 2000)—think differently about events in their own lives than about events in general (Clayton & Crosby, 1986; Crosby & Clayton, 1986; Postmes, Branscombe, Spears, & Young, 1999). The phenomenon appears to be part of people’s tendency to imagine

that justice exists in their own personal worlds more than in the world at large (Dalbert, 1997), which, in turn, is part of the general tendency to see oneself and one’s situation in an unrealistically positive light (Baker & Emery, 1993; M. D. Robinson & Ryff, 1999; Scheier & Carver, 1985; S. E. Taylor & Brown, 1988).

A person’s reluctance to protest, or even to acknowledge, her or his own disadvantaged situation can give way to eruptions of anger if the person has an epiphany. The sudden insight that one has been less well treated than others on the basis of one’s gender or ethnicity can cause the aggrieved person to react violently against the organization in which the harm was done. Such was the finding from a study of academic women who had moved through denial to recognition of sex discrimination (Crosby & Ropp, 2002; see also Foster & Matheson, 1995, 1999).

The major benefit of affirmative action is that it does not rely on those who are placed at a disadvantage to come forward on their own behalf. Indeed, affirmative action provides the only mechanism in American jurisprudence that does not rely on the principle of standing, a principle that states that legal proceedings may be brought only by those who have been directly affected by a given situation or circumstance. By requiring that organizations monitor themselves, affirmative action relieves the aggrieved person of the responsibility of coming forward on his or her own behalf, a responsibility that, as we have shown, is not concordant with what is known of human nature.

**Other observers.** Even admitting that people are unlikely to be their own best champions, one might expect others—colleagues, supervisors, or subordinates—to come forward on behalf of an employee or student whose merit is going unrecognized or unrewarded. If personal investment makes people defensive, then those who operate at a slight distance from the situation may be expected to perceive situations with greater clarity than the victims themselves. If one could rely on observers for accuracy, furthermore, then affirmative action would become unnecessary.

A series of experiments has revealed an information-processing bias that makes the detection of unfairness extremely difficult, even for impartial observers. Specifically, it was found that discrimination is more difficult to recognize when information regarding salaries and qualifications of employees are presented in a case-by-case basis, rather than in the aggregate form (Crosby, Clayton, Alksnis, & Hemker, 1986). Crosby, Clayton, et al. (1986) presented undergraduate students with information about the salaries and qualifications of a fictional company’s different departments. Asked to identify whether gender discrimination existed, participants were unable to recognize discrimination when examining each department individually. However, when the very same information was presented in the aggregate form (i.e., in a large table) across departments, participants were able to perceive the sex discrimination that had been built into the stimulus materials. This perceptual or cognitive difficulty has been proven to persist, furthermore, whether the discrimination built into the materials is consistent with existing gender stereotypes

(e.g., places women in the disadvantaged position), is inconsistent with them (e.g., places men in the disadvantaged position), or avoids stereotypes by using more neutral circumstances (e.g., comparing Plant A and Plant B; Cordova, 1992; Crosby, Burris, Censor, & MacKethan, 1986; Crosby, Clayton, et al., 1986; Rutte, Diekmann, Polzer, Crosby, & Messick, 1994; Twiss, Tabb, & Crosby, 1989). Also noteworthy is the finding that the cognitive bias appears to operate independent of attitudes or ideology. Thus, strong feminists are no more likely than sexists to perceive sex discrimination when they encounter materials in disaggregated form. Self-reported feminism did not affect participants' ability to recognize discrimination (Crosby, Clayton, et al., 1986).

Why are observers unable to notice discrimination in individual instances? Several factors seem to contribute to the phenomenon. The equity formula by which people determine if unfairness is occurring may be too simple a heuristic device for complicated comparisons (Rutte et al., 1994). Single-case situations contain attributional ambiguities that can be resolved only when general patterns average out the idiosyncrasies (Crosby, 1984). Also, a widespread need to believe in a just world (Lerner, 1980) may encourage people to explain away differences in outcomes in terms of idiosyncratic differences in inputs (Crosby, 1984). Finally, people may assume that bad intentions are a necessary part of discrimination (Clayton & Crosby, 1992). For example, Clayton (1989) found that participants in her experiments did not perceive discrimination when gender differences in salary were perceived as unintentional. To be called discrimination, lower compensation for women had to be seen as the product of deliberate actions by the company.

This series of studies underscores the importance of using objective methods for identifying discrimination rather than relying on the good intentions of individuals for rectifying such problems. The studies also show the specific importance of implementing practices that require organizations to collect and examine systematic, aggregate data for comparative purposes. Systematic comparisons based on aggregated data are at the core of affirmative action.

In sum, valid assessments of the merits of White women and of people of color are harder to achieve than valid assessments of the merits of White men. Several factors, and not just prejudice, contribute to the problem. Passive equal opportunity programs do not suffice as a remedy for the problem because they naively rely on the aggrieved party to come forward on her or his own behalf and because they unrealistically overestimate observers' abilities to detect unfairnesses.

### **Costs of Affirmative Action**

There are potential social costs to affirmative action policies. One of the most powerful arguments against affirmative action is that it disrupts the ideal social contract in America. According to the American ideal of meritocracy, when citizens come together, whether in cooperation or competition, they do so as equals. Americans stress equal-

ity of opportunity, and a policy such as affirmative action can appear to jeopardize that cherished ideal. Several specific aspects of the general problem have been identified.

### **Undermining Confidence in Others and in the Self**

When preferences play a visible part in allocations of goods, both the direct beneficiaries of the preference and others in the situation are affected. To the extent that affirmative action is understood to operate as a system of preferences (rather than a monitoring system), observers may question the abilities of women and people of color who are admitted to schools with affirmative action policies or who work for federal contractors. Indeed, the women and people of color may come to question their own abilities.

Compelling evidence exists to show that under certain circumstances, White men question the capabilities of women and of people of color when affirmative action is known to be in operation. The underlying mechanism can be explained in terms of attribution theory: To the extent that there is a plausible attribution for a person's achievements (academic or work-related), then alternative attributions are discounted (Kelley, 1973). If affirmative action provides a salient attribution, then the person's abilities and merit will be discounted.

A number of laboratory studies (Garcia, Erskine, Hawn, & Casmay, 1981; Heilman, 1994; Heilman & Blader, 2001; Heilman, Block, & Lucas, 1992) have provided corroborative evidence. Heilman et al. (1992), for example, asked students to evaluate mock job applicants whose dossiers contained a photo of a White man or woman as well as information about educational background and work experience. Students rated women described as an affirmative action hire as less competent than men or than women without such designation. Another study by Heilman and Blader (2001) did not manipulate any attributes of the applicant but varied whether a graduate school admissions policy was described as giving "particular consideration" to women and minority applicants (the affirmative action condition), considering "a variety of factors," or relying solely on merit. When students rated bogus applications to the graduate school, women admitted under the affirmative action condition were rated as having lower qualifications and less likelihood of success than those admitted under the merit-only policy. Nor has the effect been limited to students. Heilman et al. approached 184 employed White men in public places in Chicago, Illinois, and New York, New York. They found an interesting correlation among the sample: The lower the opinion the men held about a coworker, the more they regarded affirmative action as the reason why the coworker was hired. Among a group of Canadian students, the mere mention that a minority group might benefit from affirmative action and employment equity programs led participants to derogate the members of the minority group (Maio & Esses 1998).

Unfortunately, derogation can extend even to the self. Several prominent public intellectuals, all men of color,

have decried the negative effects of affirmative action on self-esteem (Carter, 1991; Rodriguez, 1982; S. Steele, 1990). Stephen Carter (1991), now a law professor at Yale University, has written eloquently of the assault to pride that comes from being admitted to law school as the best Black applicant rather than as the best applicant.

Again, laboratory studies confirm the pernicious effects of granting preferential treatment without regard to merit. Studies have shown that people who believed they were selected on the basis of group membership rather than merit evaluated their own general and task-specific performance as lower (Heilman, Battle, Keller, & Lee, 1998) and made task choices that limited their own achievement (Heilman, Rivero, & Brett, 1991). Even the perception that someone else believes that they were chosen on the basis of gender led women to experience negative emotions. If the women did not know their own ability level, they viewed themselves as less competent and chose less difficult tasks when their partner thought they had been chosen without regard to merit but not when their partner believed merit to be the basis for selection (Heilman & Alcott, 2001).

The unintended negative effects of affirmative action are disturbing. It is worrisome to think that affirmative action might, in the words of Supreme Court Justice Stevens, “foster intolerance and antagonism against the entire membership of the favored classes” (*Fullilove v. Klutznick*, 1980, excerpted in Crosby & VanDeVeer, 2000b, p. 278). It is also sad to contemplate the self-doubt that may arise in the direct beneficiaries. Yet there are reasons why the laboratory results do not discredit affirmative action as it is actually practiced. As has been pointed out by Heilman et al. (1998) and others (Kravitz, 1995; Nacoste, 1987), some of the laboratory research conceptualized affirmative action as selection solely on the basis of group membership, without regard to merit—something that is unlikely to happen in any affirmative action plan in the real world. Even in the laboratory, when the affirmative action procedure was operationalized in a more sophisticated way, as consideration of group membership in addition to consideration of merit, reactions to it were more positive (Davis & West, 1984; Heilman et al., 1998; Kravitz, 1995; Major, Feinstein, & Crocker, 1994; Nacoste, 1987; Nosworthy, Lea, & Lindsay, 1995; Richard & Kirby, 1997, 1998; Stanush, Arthur, & Doverspike, 1998; Summers, 1995; see also Crosby, in press, chapter 5). Similarly, when the beneficiaries of affirmative action were told that their qualifications were high, they did not show the same negative effects as when they believed their abilities were not a factor in selection (Heilman et al., 1991).

Although some laboratory research has focused on the potential for self-doubt, other research traditions have emphasized ego-protective mechanisms that limit self-doubt. Crocker and Major (1989; Major & Crocker, 1993) have argued that stigmatized individuals may be unaffected by the negative opinions of Whites or men because they see the negativity as motivated more by racism or sexism than by realistic doubts about abilities. Crocker and Major (1989; Major & Crocker, 1993) originally argued that such external attributions protect self-esteem among disadvan-

taged group members because their own merit is not called into question (see also Crocker et al., 1991). Subsequent research has suggested, however, that the benefits of attributions to prejudice are moderated by situational factors (e.g., the clarity of the prejudice cues) and individual differences such as level of group identification and belief in legitimizing ideologies (for a review, see Major, Quinton, & McCoy, in press). Thus, under certain conditions, members of disadvantaged groups may be immune to the stigma attached to being considered an affirmative action recipient.

In everyday work situations outside the laboratory, where people learn much more about their own competence and the competence of others than in laboratory settings, the affirmative action label seems not to produce the negative effects that have been found under certain laboratory conditions. Parker et al. (1997) conducted a survey of 7,000 employees of a large governmental agency working at 11 different sites and found, quite to their surprise, that White men in the survey did not derogate affirmative action targets but rather valued the organization’s commitment to diversity. Among the sample of nearly 5,000 White men in the agency, the more a man felt his organization stressed diversity and affirmative action, the more satisfied and loyal he felt.

Similarly, large-scale surveys have shown that the direct beneficiaries of affirmative action do not seem to feel undermined by the policy (Fine, 1992; “Gallup Short Subjects,” 1995; Parker et al., 1997; Simpson, 1996; M. C. Taylor, 1994). Meanwhile, small in-depth studies have illuminated the reasons for the findings of the large-scale studies. Ayers (1992) asked a small sample of women of color about their reactions to having been selected for jobs and awards on the basis of ethnicity and gender as well as merit. Her participants were explicit in their accounts of why they felt empowered, rather than undermined, by affirmative action and opined that any doubts cast on them would have been cast—and with greater negative affect—in the absence of affirmative action.

Laboratory and field evidence have both underlined that it may be veridical and not just self-protective for minorities and White women to interpret White and male resistance to affirmative action as the result of bias. In the laboratory, Heilman and Blader (2001) found that students believed gender was relevant to an applicant’s admission to graduate school, even if an affirmative action policy was not stated, when the applicant was the only woman in the class. Gender was not seen as relevant when the applicant was the only man in the class, even if an affirmative action policy was described. Field studies have shown that one of the strongest predictors of opposition to affirmative action is prejudice (Crosby, Ferdman, & Wingate, 2001; D. R. Williams et al., 1999). The less sexist a man is, the more likely he is to endorse affirmative action for women (Tougas, Crosby, Joly, & Pelchat, 1995). Similarly, less racist White people endorse affirmative action more strongly than do more racist White people (Bobo, 2000; Dovidio & Gaertner, 1996; Hayes, Brief, Dietz, & Reizenstein, 1998; Kinder & Sanders, 1996; Sidanius, Pratto, & Bobo, 1996).

It is, of course, possible to oppose affirmative action on principled grounds because of a belief that the policy flies in the face of distributive and procedural justice (Kuklinksi et al., 1997). In one recent study, students who endorsed the principles of meritocracy tended to strongly support or strongly oppose affirmative action, depending on whether they believed that discrimination does or does not currently hamper minorities (Son Hing, Bobocel, & Zanna, in press). Analyzing data from the 1999 Race and Politics Survey, Carmines and Layman (1998) found a reliable association between prejudice and opposition to race-sensitive policies such as affirmative action among Democrats, but not among Republicans. In a recent survey of White respondents in the Detroit, Michigan, metropolitan area, D. R. Williams et al. (1999) found that beliefs in economic individualism actually predicted support for affirmative action when prejudice was held constant.

Yet, as was shown by Bobocel, Son Hing, Davey, Stanley, and Zanna (1998), justice can also be a rationalization for objections that are really based on prejudice. Clayton (1996) investigated attitudes toward the use of different identity groupings (race, sex, religion) for a variety of purposes (social group, political group, or consideration in college admissions). She found that evaluations varied according to the type of program and the group. For example, the White participants were more positive about affirmative action when the targeted group was women than when it was ethnic minorities. Clayton concluded that attitudes toward different groups may be hidden in principled objections to social policies.

In sum, the issue of preferential treatment is a sensitive one, likely to ignite strong and sometimes unreasoned feelings. For those who see affirmative action as a quota system, both the intended beneficiaries and the others in the system suffer. On the other hand, to the extent that affirmative action is seen to operate as a system that dismantles existing preferences, people may come to question the abilities of White men who have been admitted to schools without explicit affirmative action policies or who work for organizations without affirmative action (Konrad & Linnehan, in press). Either way, affirmative action incurs the cost of unseating people's assumption that just wishing the world to be a just place makes it so (Crosby, 1994, in press; Lerner, 1980).

Perhaps because they live in a world where principles are frequently articulated or perhaps because they have less confidence and maturity than older adults, college students have been found to be more affected by the self-attributional aspects of affirmative action than are workers. On the one hand, systematic studies show that students of color endorse affirmative action (Ponterotto, Martinez, & Hayden, 1986; Truax, Wood, Wright, Cordova, & Crosby, 1998). One study of Black college students has shown that the more pride they took in their ethnic identity and the more central it was to their sense of self, the more strongly the students endorsed affirmative action (Schmermund, Sellers, Mueller, & Crosby, 2001). The same finding has been replicated with Latino students (Elizondo & Hu, 1999). On the other hand, two studies have shown that for

those students who feel self-doubt, the academic consequences can be quite detrimental (R. P. Brown, Charnsangavej, Keough, Newman, & Rentfrow, 2000; van Laar & Levin, 2000).

### **Noticing Demographic Characteristics**

Affirmative action is a policy that requires organizations to take cognizance of people's demographic characteristics, and many Americans would prefer to encounter others without considering whether the other is male or female, a White person or a person of color. Until recently, for a White American to notice that another was, say, Black was likely to carry with it the automatic assumption that the other was inferior, defective, or only partially human. It would seem logical to assume that one way to evolve beyond the shameful past would be to refuse to notice the color of the other.

White discomfort when attention is drawn to race may also spring as much from the desire not to admit that one is racist as from the desire not to be racist. The same dynamic may apply to male discomfort when attention is drawn to gender. Branscombe (1998) has demonstrated that White men are the ones who feel uneasy and undermined when attention is drawn to demographic groupings, perhaps because such attention erodes the comfortable assumption that they have earned their privilege entirely through dedication and talent.

### **Driving a Wedge Into the Black Community**

Affirmative action in employment helps those ethnic minority applicants who have good qualifications. However, it does not help people acquire the basic qualifications that enable them to be part of the modern economy. Both William Juris Wilson (1996) and Glenn Loury (1998) have signaled the possibility that affirmative action has driven a wedge into the Black community between middle-class Blacks and inner-city members of what Wilson called "the underclass."

Empirical data from two different sources argue against the wedge theory. First, as Bowen and Bok (1998) and others have compellingly shown, well-educated ethnic minority individuals tend to give back to their communities. Second, examination of economic data show no greater bifurcation of wealth among African Americans than among Whites in the period following 1965, when EO11246 was signed into law (Crosby, Allen, & Opatow, 1992). Perhaps because of the compelling nature of the data, Loury (2001) has recently retracted his objections to affirmative action.

### **Depletion or Degradation of Common Resources**

Implementation of the policy of affirmative action costs money. Individual organizations invest resources, for example, by hiring an affirmative action officer, preparing affirmative action plans, placing special outreach advertisements, or holding training sessions for employees. American society also pays for the running of the OFCCP. Taxpayers spent approximately \$55 million on the imple-

mentation of affirmative action in 1992 and about \$77.5 million a decade later. To gauge the scale, the budget of the OFCCP is about one fifth the size of the budget of the Office of Equal Employment Opportunities (Crosby, in press, chapter 3).

Perhaps a more serious problem than the budget is the potential for the degradation of public services. If the effort to achieve diversity means that incompetent people are being hired into positions of public trust, then society bears a large burden. Such, claimed Linda Gottfredson (1996), is exactly what has happened with the police force in Nassau County, New York. Gottfredson had served as a consultant to the Justice Department when police forces were attempting to develop written screening tests that would not eliminate ethnic minority candidates in greater proportion than White candidates. Gottfredson published her disgust at the corrupt process and warned the public about the consequences of police forces that are functionally illiterate.

Are Gottfredson's (1996) worries valid? Is she a Cassandra or a legitimate whistle-blower? At the moment, hard evidence from other sources is scarce and contradictory. One study (J. R. Lott, 2000) provided evidence consistent with the claim that police departments have deteriorated since the implementation of a new testing system, but from another study (Steel & Lovrich, 1987) with a slightly different methodology, a different picture emerged. Yet even if the abuses are not as devastating as Gottfredson claimed, her warnings should be seriously heeded. Accounting systems can be falsified in the short run, and a mechanical compliance with the letter of the law, but not the spirit of the law, can have serious negative consequences.

### **Implications of the Costs: Devising Effective Affirmative Action Programs**

The potential costs of affirmative action cannot be ignored. Whenever an organization engages in unjustified preferential treatment and calls it affirmative action, the system works poorly. Not only are members of the dominant groups harmed by preferential treatment of minority group members; so are the minority group members themselves. An additional cost of affirmative action is that it necessarily draws attention to demographic markers such as ethnicity and gender. It has also been suggested that affirmative action may drive a wedge into ethnic minority communities, with opportunities going only to the well-educated. Finally, the thrust toward diversity and inclusiveness may carry general societal costs in terms of the spending of or degradation of resources.

It would be as frivolous to deny any problems of affirmative action, either in the formation of the policy or in its implementation, as it would be to assume that affirmative action is all bad. Paying attention to the problems may help officials enhance the effectiveness of affirmative action. Indeed, if one tries to devise a policy or to implement affirmative action without reckoning on the actual and the perceived problems of the policy, one runs the risk of augmenting negative reactions.

One can distinguish between strategies that enhance support for the policy generally and tactics that enhance acceptance of specific affirmative action plans. Several researchers have advocated education as the primary means of increasing acceptance (Crosby & Clayton, 2001). Certainly, a lot of evidence (see, e.g., K. A. Quinn, Ross, & Esses, 2001) has shown that attitudes toward affirmative action are heavily influenced by how the policy is framed. Golden et al. (2001) found that people who knew that affirmative action is a monitoring system tended to support the policy whereas people who mistook it for a quota system did not. This research suggests that one way of increasing support for affirmative action is to dispel the myths that surround it (Plous, 1996).

Another strategy for increasing acceptance is to "practice the psychology of the inevitable" (Pratkanis & Turner, 1996, p. 126). As past research in the acceptance or rejection of desegregation has shown, when a policy is perceived as inevitable, people are less likely to challenge it (Pettigrew, 1961). Even the advocates of affirmative action have tended to assume that the policy can be revoked. Thus, for example, President Clinton commenced his review of affirmative action with the open question of whether it would be in the national interest to keep the policy or jettison it.

The psychology of the inevitable can also operate as a tactic when organizations are implementing specific plans. Such an approach involves "requiring in-group members to bring their attitudes in line with the new reality" (Pratkanis & Turner, 1996, p. 127). Given what is known about cognitive dissonance reduction, organizations may wish to align actions and attitudes (Pratkanis & Turner, 1994a, 1994b; Turner & Pratkanis, 1994a, 1994b).

Pratkanis and Turner (1996) outlined several additional tactics for achieving effective affirmative action programs. First and foremost, hiring officials must make clear the qualifying criteria for a position so that applicants and workers alike can identify how the applicant fits those criteria. The work of Madeleine Heilman and others (e.g., Heilman, 1994; Heilman & Alcott, 2001) has shown that preferential treatment has pernicious effects. It is critical, therefore, that officials with responsibility for implementing affirmative action strictly avoid the appearance as well as the reality of selections based solely on characteristics acquired at birth. Pratkanis and Turner also noted the importance of highlighting an individual's unique job-related contributions to an organization. Konrad and Linnehan (1995a, 1995b) counseled organizations to celebrate the accomplishments of individuals who have joined an organization through affirmative action and then to advertise the subsequent achievements of the work groups to which they belong.

Another tactic for implementing effective affirmative action programs has to do with pointing out how affirmative action benefits Whites as well as people of color and men as well as women. Research such as that of Gurin et al. (2002) has demonstrated the rewards that accrue to White students in schools that implement affirmative action in admissions, and other research (e.g., Wright et al., 1995)

has shown the benefits to all stakeholders when organizations reap the financial rewards of well-devised affirmative action plans. Heralding such benefits may enhance acceptance of affirmative action.

## Parting Note

Affirmative action serves many purposes. Unlike most educators who make the case for affirmative action primarily on the basis of diversity, we argue that the main reason to endorse affirmative action in education and employment is to reward merit. Without the systematic monitoring of affirmative action, one can maintain the fiction of a meritocracy but will have difficulty establishing and sustaining a true meritocracy.

We have drawn a sharp distinction between merit and diversity for expository purposes. This distinction is important to acknowledge, given that it is at the core of most of the attacks on affirmative action. Yet one positive consequence of the debates on affirmative action might be a new awareness of how—at the level of groups—merit and diversity are inextricably linked.

The link between group excellence and diversity within the group is apparent in analyses of specific affirmative action programs. In the 1970s, for example, the New York City Fire Department was sued for sex discrimination (Norris & Reardon, 1989). One positive result of the suit was the articulation of a complex set of criteria that make for effective firefighting. Endurance was, for example, distinguished from explosive strength, which in turn was assessed separately from manual flexibility, and officials gave explicit recognition to the need for complementary skill sets. As a result of the suit, administrators devoted attention to team-building exercises, and the enhanced coordination of the efforts of individual firefighters was acknowledged to have resulted in increased effectiveness of the units overall.

Questions of affirmative action in both employment and education have illuminated an observation of fundamental importance: Organizations need a variety of different talents. It is unlikely that any one person would be the most outstanding individual on all dimensions of talent. Although it may be psychologically satisfying to recognize and reward outstanding achievements of individuals, it is nonetheless true that groups, teams, organizations, and societies may function best if they include and make use of many different types of talent. Thus, in the end, the merit of the group may depend on the diversity of talented individuals within it.

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### Correction to Krueger (2001)

The article “Null Hypothesis Significance Testing: On the Survival of a Flawed Method,” by Joachim Krueger (*American Psychologist*, 2001, Vol. 56, No. 1, pp. 16–26), contained an error.

In Figure 2, on page 22, two of the curves are labeled “ $p(H_0) = .9$ ” and “ $p(H_0) = .1$ .” These labels should have been reversed.