CHAPTER 10

Perception and Attribution

STEREOTYPE THREAT AT WORK
Loriann Roberson,
Carol T. Kulik

COMMUNICATING ACROSS CULTURES
Nancy J. Adler

This chapter deals with perception, the process by which we select, organize, and evaluate the stimuli in our environment to make it meaningful for ourselves. As a result, people can look at the same event or behavior and take away very different impressions and conclusions about what they "saw." People also make attributions, assigning causes to the behaviors they observe, in unique ways. Dealing with conflicting perceptions and attributions makes many aspects of organizational life more challenging—in particular, communication, teamwork, performance evaluation, and strategic decisions. One of the most common perception-related problems is stereotyping, which occurs when we attribute behavior or attitudes to people on the basis of the group or category to which they belong.

Loriann Roberson, professor of psychology and education at Columbia University, and Carol Kulik, a human resources professor at the University of South Australia, examine how stereotype threat—the fear of being judged according to a negative stereotype—can adversely affect performance. Reviewing over a dozen years of research, they suggest that stereotype threat may be a pervasive organizational phenomenon that affects a broad array of employees. Roberson and Kulik provide practical guidelines for reducing the negative consequences of stereotype threat when it does occur and for creating environments in which stereotype threat is minimized.

The potential for inaccurate perceptions, mistaken attributions, and stereotyping is very obvious in cross-cultural interactions. Nancy Adler, a well-known international management consultant and McGill University scholar, describes the primary difficulties of "Communicating Across Cultures." She provides numerous examples of cultural errors in perception and a framework for understanding why they occur. Adler contends that stereotypes can be both helpful and harmful and provides advice on using them in a positive way.

STEREOTYPE THREAT AT WORK*

Loriann Roberson
Carol T. Kulik

EXECUTIVE OVERVIEW

Managing diversity in organizations requires creating an environment where all employees can succeed. This paper explains how understanding "stereotype threat"—the fear of being judged according to a negative stereotype—can help managers create positive environments for diverse employees. While stereotype threat has received a great deal of academic research attention, the issue is usually framed in the organizational literature as a problem affecting performance on tests used for admission and selection decisions. Further, articles discussing stereotype threat usually report the results of experimental studies and are targeted to an academic audience. We summarize 12 years of research findings on stereotype threat, address its commonplace occurrence in the workplace, and consider how interventions effective in laboratory settings for reducing stereotype threat might be implemented by managers in organizational contexts. We end the paper with a discussion of how attention to stereotype threat can improve the management of diversity in organizations.

Ongoing demographic trends (increasing percentages of African Americans, Hispanics, and Asians in the American workforce, an aging population, expanding female labor force participation) have made diversity a fact of organizational life. When these trends were first identified in the mid-1980s, they were heralded as an opportunity for organizations to become more creative, to reach previously untapped markets, and in general to achieve and maintain a competitive advantage (Cox, 1994; Robinson & Dechant, 1997; Thomas & Ely, 1996).

However, employee diversity does not *necessarily* boost creativity, market share, or competitive advantage. In fact, research suggests that left unmanaged, employee diversity is more likely to damage morale, increase turnover, and cause significant communication problems and conflict within the organization (Jackson et al., 1991; Jehn, Neale, & Northcraft, 1999; Tsui, Egan, & O'Reilly, 1992; Zenger & Lawrence, 1989). Thus, "managing diversity" has become a sought-after managerial skill, and concerns about effective diversity management have spawned an industry of diversity training programs, diversity videos, and diversity consultants. But despite several decades of effort and millions of dollars invested, the evidence suggests that organizations continue to do a poor job of managing diversity. A recent comprehensive report concluded that organizations rarely are able to leverage diversity and capitalize on its potential benefits (Hansen, 2003; Kochan et al., 2003). What's the problem? Are we missing a key piece of the diversity management puzzle?

Most of the attention in the diversity management literature has been focused on the organizational decision maker—the manager who is prejudiced against certain groups and who allows these prejudices to influence how he or she treats employees. These individual-level prejudices become institutionalized—meaning, they become embodied in organizational policies and practices that systematically disadvantage some employees. In their efforts to reduce discrimination, organizations are increasingly concerned about hiring non-prejudiced managers, redesigning biased selection, appraisal, and promotion procedures, and generally eradicating

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ereotypes from managerial decision making (Greengard, 2003; Rice, 1996). If we liminate stereotypes from organizational decision making, the logic goes, we'll eate an organization where all employees can flourish and advance.

Unfortunately, even if an organization were successful in hiring only non-rejudiced managers and eliminating stereotypes from its formal decision making, ereotypes would still exist in broader society. As a result, every employee walking rough the door of the organization knows the stereotypes that *might* be applied to m or her and wonders whether organizational decision makers and co-workers will ndorse those stereotypes. Here, we discuss the effects of these stereotypes, and ghlight an important aspect of diversity management that has not received much tention by diversity or management scholars: stereotype threat, the fear of being dged and treated according to a negative stereotype about members of your group iteele, Spencer, & Aronson, 2002). Research on stereotype threat has shown that ocietal stereotypes can have a negative effect on employee feelings and behavior, aking it difficult for an employee to perform to his or her true potential. Research as also indicated that stereotype threat can result in employees working harder, but ot better. When stereotype threat is present, performance declines. Therefore, a on-prejudiced manager who uses objective performance indicators as a basis for ecision making risks underestimating the employee's true ability. When an organi-ational context contains the conditions that create stereotype threat, nontraditional nployees experience additional barriers to success despite the good intentions of eryone involved. Therefore, stereotype threat places certain demands on the anager of diverse employees—demands to create conditions that minimize the currence of stereotype threat, so that all employees can perform effectively.

Stereotype threat has been discussed almost exclusively as an issue for high stakes sting, particularly in educational arenas. For example, we're all familiar with the oppor-nities that hang on scores from tests such as the Scholastic Aptitude Test (SAT), the raduate Record Examination (GRE) and the Graduate Management Achievement Test iMAT): without the "right" scores, a student won't be able to get into the best college r his or her chosen field. In 1999, PBS aired a documentary concluding that stereotype reat was suppressing the standardized test performance of African American students handler, 1999). These effects on high stakes tests are important, but stereotype threat is t limited to African-American students taking large-scale standardized academic tests. is also present in the everyday, routine situations that are a part of all jobs. Thus, knowl-ge of stereotype threat and its corrosive effects on performance is needed to understand e work experience of members of stereotyped groups and to manage diversity more ectively in the organization. In this article, we answer the following questions: What is reotype threat and what are its effects? How can stereotype threat be reduced?

We begin with a short review of the concept and the research evidence. We then scribe the conditions that increase the risk of stereotype threat. Because these condi-ns regularly occur in the workplace, stereotype threat is also likely to be a common rt of many people's work experience. Finally, we present strategies for reducing reotype threat from the academic research literature, and consider if and how those ategies might be applied in organizations. We also discuss how attention to stereo-pe threat adds value to current organizational approaches to managing diversity.

ereotype Threat at Work

ery job involves being judged by other people, whether you are giving a sales esentation to clients, representing your work team at a meeting, or showing your boss ur work for some informal feedback. Being evaluated can raise anxieties for anyone. prehension in these kinds of situations is a common phenomenon, and in fact, a little xiety can even boost performance (Cocchiara & Quick, 2004; Reio & Callahan,

2004; Yerkes & Dodson, 1908). But anxieties can be heightened for those employees who are members of a negatively stereotyped group, especially when they are perform-ing a kind of task on which, according to the stereotype, members of their group do poorly. Consider these statements by people who are members of stereotyped groups:

> *From a marketing manager: "You can see in someone's eyes when you are first introduced that you're dead in the water just because you're seen as old." Many older workers refer to "the look" on someone's face as they are introduced. A 57 year old accounts supervisor recounted that on meeting someone face to face for the first time, she was told with a tone of disappointment, "Oh, you have such a young voice on the phone." (Blank & Shipp, 1994)*
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> *From a White loan officer (concerned about being perceived as racist or sexist): "I'm always worried about how I was heard. How will I be interpreted? Did I say the wrong thing?" (Blank & Shipp, 1994)*
>
> *From a Black manager: "I felt Whites had a lot of negative ideas about Blacks. I felt evaluated when I asked questions. Asking questions became painful for me." (Dickens & Dickens, 1991)*
>
> *From an overweight worker: "... I work extra hard because I know the stereotype, and I feel I need to prove myself. I work harder than most of my coworkers who do the same job. Yet my (skinny, size-10) boss continu-ally talks about me behind my back to my coworkers—she says that I'm lazy and that I don't take any initiative, and who knows what else. She sees me for maybe half an hour out of the work week, which is hardly enough time to judge me on my work ... It doesn't matter that I know the job inside-out, or that my customer-service skills are top-notch. It doesn't matter that I'm on time and do any stupid little task that I'm asked. All that matters is the width of my ass." (Personal blog, 2005)*

The individuals quoted here are members of different identity groups, but they all voice a common concern: the fear of being seen and judged according to a nega-tive stereotype about their group, and the concern that they might do something that would inadvertently confirm the negative stereotype (Steele, 1997; Steele et al., 2002). These individuals are experiencing "stereotype threat."

Stereotype threat describes the psychological experience of a person who, while engaged in a task, is aware of a stereotype about his or her identity group suggesting that he or she will not perform well on that task. For example, a woman taking a math test is familiar with the common stereotype that "girls aren't good at math." Or a Black faculty member preparing his case for promotion is aware that some people believe that Blacks are intellectually inferior. This awareness can have a disruptive effect on perfor-mance—ironically resulting in the individual confirming the very stereotype he or she wanted to disconfirm (Kray, Thompson, & Galinsky, 2001). Anyone can experience anxiety while performing a task with important implications (a test to get into graduate school or a presentation to a big client), but stereotype threat places an *additional* bur-den on members of stereotyped groups. They feel "in the spotlight," where their failure would reflect negatively not only on themselves as individuals, but on the larger group to which they belong. As singer and actress Beyoncé Knowles said in an interview with *Newsweek* in 2003: "It's like you have something to prove, and you don't want to mess it up and be a negative reflection on black women" (quoted in Smith, 2004, p. 198).

In the first (and now classic) study on stereotype threat, Claude Steele and Joshua Aronson (1995) asked Black and White students to take a very difficult test. The test was composed of items from the verbal section of the Graduate Record Examination,

and it was deliberately designed to tax students' ability. For some students, this test was described simply as a laboratory problem-solving task. However, for other students, the test was described as a "genuine test of your verbal abilities and limitations." The important difference between these two descriptions was that race stereotypes were irrelevant in the "laboratory task" version—there was no reason for a Black participant to expect race to impact his or her performance, or to think that other people might expect race to have an impact. However, in the scenario where the test was described as a genuine test of abilities and limitations (the stereotype threat condition), the racial stereotype (that Blacks lack intellectual ability) *was* relevant, and the researchers predicted that Black participants would be both aware of the stereotype and want to avoid confirming it.

When Steele and Aronson examined the results, they found that White students' performance was largely unaffected by the test instructions—the White students performed about equally well whether the test had been described as an ability test or as a laboratory problem-solving task. However, the instructions made a big difference in the performance of Black students. They performed less well in the ability test condition than in the problem-solving condition—even though the test was equally difficult in both conditions. In fact, after Steele and Aronson controlled for pre-study differences in ability (measured by the students' SAT scores), they found that Black and White students in the laboratory problem-solving condition performed about the same—but Black students underperformed relative to Whites in the ability test condition (Steele & Aronson, 1995).

This basic experimental design, in which researchers compare the performance of two groups (one group is negatively stereotyped, the other is not) in two task conditions (one condition presents the task as stereotype-relevant, the other does not), has been replicated many times over the last twelve years with consistent results. The negatively stereotyped group underperforms when the stereotype is seen as relevant to the task. This research is summarized in Table 1.

As the table shows, the stereotype threat phenomenon has been documented in a large number of groups, across a wide range of diversity dimensions, and in many different performance domains. In the top (unshaded) part of the Table, the "Who was affected?" column includes the people we generally think of as disadvantaged in the workplace due to negative stereotypes—racial and ethnic minorities, members of lower socio-economic classes, women, older people, gay and bisexual men, and people with disabilities. The academic literature sometimes describes members of these groups as "stigma conscious" (Aronson et al., 1999). That means that members of these groups can be very aware of the social stereotypes other people associate with their group. Since the relevant stereotype is very likely to come to mind, concerns about stereotype confirmation are easily aroused. As a result, very subtle contextual variations (a slight wording difference in the way a test is described, for example) may be enough to make the stereotype salient and disrupt performance.

But research has shown that this phenomenon does not apply only to people in disadvantaged groups. In fact, the bottom (shaded) part of Table 1 shows that even members of high status groups can experience stereotype threat. For example, we don't normally think of White men as being disadvantaged in the workplace. White men generally enjoy more hiring opportunities, higher salaries, and more organizational status than women or members of racial minority groups with comparable education and ability (Hite, 2004; Parks-Yancy, 2006). However, even high status groups have some negative stereotypes associated with them, and one of the stereotypes most strongly associated with the White group is the belief that Whites are racist (Frantz et al., 2004). The research suggests that many Whites are chronically concerned with not appearing racist (and inadvertently confirming the stereotype). Therefore, task situations that are described as dependent on racial attitudes can trigger stereotype threat in Whites (and result in participants looking more prejudiced than they might actually be) (Frantz et al., 2004).

Table 1 Examples of Examples of Stereotype Threat[1]

Who was Affected?	How did the Researchers Create Stereotype Threat?	What Stereotype was Activated?	What Happened?
Black students	Told the students that they were about to take a very difficult test that was a "genuine test of your verbal abilities and limitations"	"Blacks lack intellectual ability"	The students performed less well on the test
Latino students	Told the students that they were about to take a very difficult mathematical and spatial ability test that would provide a "genuine test of your actual abilities and limitations"	"Latinos lack intellectual ability"	The students performed less well on the test
Low socioeconomic status (SES) students	Asked the students to provide background information including their parents' occupation and education, then told them they were about to take a difficult test that would "assess your intellectual ability for solving verbal problems"	"Low SES students lack intellectual ability"	The students attempted to solve fewer problems and had fewer correct answers on the test
Women	Reminded the women that "previous research has sometimes shown gender differences" in math ability, then asked them to take a test that "had shown gender differences in the past"	"Women have weak math ability"	The women performed more poorly on the math test
Older individuals (60 years and older)	Gave the older people a series of memory tests and presented them with a list of "senile" behaviors ("can't recall birthdate") too quickly for conscious awareness. Then researchers gave the older people the memory tests a second time	"Older people have bad memory"	The older people had a significant decline in memory performance from pretest to posttest
Gay and bisexual men	Asked the men to indicate their sexual orientation on a demographic survey, then videotaped the participants while they engaged in a "free play" activity with children	"Gay men are dangerous to young children"	Judges rated the men as more anxious and less suitable for a job at a daycare center
People with a head injury history	Told participants that a "growing number" of neuropsychological studies find that individuals with head injuries "show cognitive deficits on neuro-psychological tests," then gave participants a series of tests assessing memory and attention	"Persons with a head injury history experience a loss of cognitive performance"	The participants performed worse on tests of general intellect, immediate memory, and delayed memory
Whites	Told participants that a "high proportion of Whites show a preference for White people" before asking them to complete the IAT (implicit attitude test) that would measure their "unconscious racial attitudes toward Blacks and Whites"	"Whites are racist"	The participants had a larger IAT effect (the difference in response time between incompatible and compatible trials), suggesting a preference for White faces
White students	Gave the students a packet of newspaper articles emphasizing a "growing gap in academic performance between Asian and White students" before asking them to take a very challenging math test	"White students have less mathematical ability than Asian students"	The students solved fewer problems on the math test

(continued)

Table 1 Continued

Men	Reminded participants that "it is a well-known fact that men are not as apt as women to deal with affect . . . and to process affective information as effectively" then asked them to indicate whether a series of words were "affective" or not	"Men are less capable than women in dealing with affective (emotional) information"	The men made more errors on the task
White men	Told the men that they would be engaged in a golf task that measured their "natural athletic ability." The men completed a demographic survey that included a question about their racial identity, then took the test	"White men have less athletic prowess than Black men"	The men made more strokes (performed worse) on the golf task

[1]The research summarized in this table include the following articles: Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology,* 69, 797–811; Gonzales, P. M., Blanton, H., & Williams, K. J. (2002). The effects of stereotype threat and double-minority status on the test performance of Latino women. *Personality and Social Psychology Bulletin,* 28, 659–670; Croize, J., & Claire, T. (1998). Extending the concept of stereotype threat to social class: The intellectual underperformance of students from low socioeconomic backgrounds. *Personality and Social Psychology Bulletin,* 24, 588–594; Spencer, S. J., Steele, C. M., & Quinn, D. M. (1999). Stereotype threat and women's math performance. *Journal of Experimental Social Psychology,* 35, 4–28; Bosson, J. K., Haymovitz, E. L., & Pinel, E. C. (2004). When saying and doing diverge: The effects of stereotype threat and self-reported versus non-verbal ability. *Journal of Experimental Social Psychology,* 40, 247–255; Suhr, J. A., & Gunstad, J. (2002). "Diagnosis threat": The effect of negative expectations on cognitive performance in head injury. *Journal of Clinical and Experimental Neuropsychology,* 24, 448–457; Frantz, C. M., Cuddy, A. J. C., Burnett, M., Ray, H., & Hart, A. (2004). A threat in the computer: The race implicit association test as a stereotype threat experience. *Personality and Social Psychology Bulletin,* 30, 1611–1624; Aronson, J., Lustina, M. J., Good, C., Keough, K., Steele, C. M., & Brown, J. (1999). When White men can't do math: Necessary and sufficient factors in stereotype threat. *Journal of Experimental Social Psychology,* 35, 29–46; Leyens, J., Desert, M., Croizet, J., & Darcis, C. (2000). Stereotype threat: Are lower status and history of stigmatization preconditions of stereotype threat? *Personality and Social Psychology Bulletin,* 26, 1189–1199; Stone, J., Lynch, C. I., Sjomeling, M., & Darley, J. M. (1999). Stereotype threat effects on Black and White athletic performance. *Journal of Personality and Social Psychology,* 77, 1213–1227.

Further, members of any group may experience stereotype threat when their identity group is negatively compared with another group. For example, comparative stereotypes suggest that Whites have less mathematical ability than Asians, men are less effective in processing affective (emotional) information than women, and White men have less athletic prowess than Black men. These negative comparisons can induce stereotype threat, and members of the target group demonstrate the short-term performance detriments associated with stereotype threat, as the studies listed in the table have found. One conclusion that can be drawn from looking at the table is that stereotype threat can affect all of us because each of us is a member of at least one group about which stereotypes exist. If you think about the stereotypes that could be applied to your own social group, you might recall situations where you personally experienced stereotype threat. If you think about the stereotypes that could apply to your employees, you can also identify the situations where they might be vulnerable to stereotype threat.

The research referred to in the table has decisively shown that stereotype threat has a negative impact on short term performance. But an unresolved question is *why* does stereotype threat have this negative impact? Researchers have suggested several different answers to this question (the literature calls these answers "mediating" explanations), but there is no consensus on which is the "right" answer. The dominant explanation has to do with anxiety (Aronson, Quinn, & Spencer, 1998), but there is still some disagreement over how anxiety affects performance. One argument suggests that anxiety increases a person's motivation and effort. Stereotype threatened participants are very motivated to perform well, and sometimes they try

too hard or are too cautious in performing (Cadinu et al., 2003). For example, Steele and Aronson (1995) found that the Black participants in their research spent too much time trying to answer a small number of problems. They worked too hard on getting the right answer, and they disadvantaged themselves by not answering enough questions. Another argument proposes the opposite—that anxiety decreases a person's motivation and effort (Cadinu et al., 2003). The explanation is that stereotype threatened participants lose confidence that they can perform well, and in a self-fulfilling way this undermines performance. Given that the evidence thus far is still mixed and unclear, we will have to wait for further research to provide a more definitive answer to the *why* question. However, research has clearly identified the conditions under which stereotype threat is more and less likely to occur. This brings us to the next section of our paper.

Conditions for Stereotype Threat

We've seen that the content of stereotypes about groups includes beliefs about the abilities of group members to perform certain kinds of tasks. Stereotype threat will only occur for those tasks associated with the stereotype. But simply being *asked* to perform a stereotype-relevant task is not enough to create stereotype threat. Research has identified two additional conditions needed for stereotype threat to emerge: task difficulty and personal task investment. In addition, the context can influence the perceived relevance of the stereotype for performance of the task or job. We have diagrammed these conditions, and the stereotype threat process, in Figure 1.

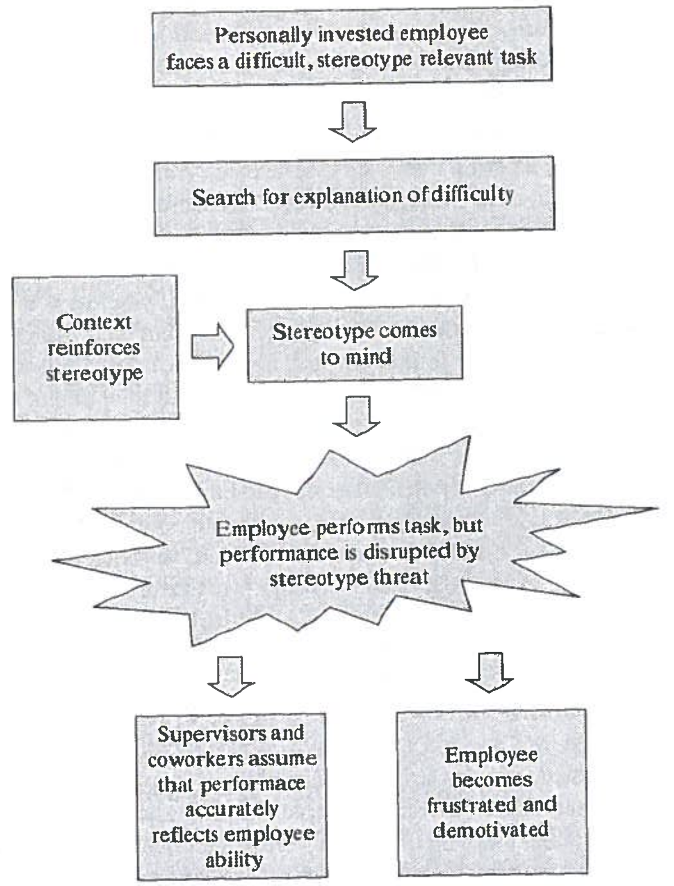

FIGURE 1 The stereotype threat process

;tereotype Relevance of the Task: What Does it Take to Perform Well?

;tereotype threat is situation specific, felt in situations where one can be "judged by, reated and seen in terms of, or self-fulfill a negative stereotype about one's group" Spencer, Steele, & Quinn, 1999, p. 6). These situations occur when doing well on he task requires an ability on which, according to the stereotype, the person perorming the task has a deficit. In the studies we have reviewed, the stereotype releance of the task has often been created by telling participants that the task is a direct test" of the stereotyped ability. So, for example, math tests have been used to create stereotype relevant task for women and verbal or cognitive ability tests used to crete stereotype relevant tasks for African Americans and Hispanics. But stereotype elevance isn't limited to standardized tests. Laura Kray and her colleagues surveyed articipants to show that negotiation tasks are stereotype relevant for women. The esearchers found that people believed that good negotiators were "assertive and oncerned with personal gain" *and* that "men are more likely to be assertive than /omen" (Kray, Galinsky, & Thompson, 2002). Therefore, it logically follows that men are better negotiators than women."

Research has shown that in our society many people believe successful mangers have attributes more similar to those of men and Whites than to those of /omen, Hispanics, or African Americans (Chung-Herrera & Lankau, 2005; leilman, Block, Martell, & Simon, 1989; Tomkiewicz, Brenner, & Adeyemi-Beilo, 998). But beliefs about the traits necessary for jobs can also be organization pecific. The potential for stereotype threat exists any time employees' beliefs bout the particular traits needed for good job performance are linked to stereotypes bout groups.

'ask Difficulty: Why is this so Hard?

tereotype threat is most likely to influence performance on very difficult tasks—those ıat are at the limits of a person's abilities (Steele et al., 2002). On easier tasks, stereo/pe threat doesn't have much negative effect. According to psychologist Claude teele, experiencing frustration with task accomplishment is an important trigger for ereotype threat (Steele et al., 2002). On a simple task there is little frustration—the erson is doing well and knows it. But with a difficult task, progress is not so smooth. eople who experience frustration with a task try to explain their difficulty to themelves: "Why is this so hard? Is this job just impossible? Am I not working hard ıough? Am I having a bad day?" They also think about how others (co-workers, ıpervisors) will explain their difficulty: "Will they think I'm not working hard ıough?" But when the person is a member of a stereotyped group, the stereotype is so likely to come to mind as a potential explanation that others might use: "Will they ink the stereotype is true? It's going to look like the stereotype *is* true."

A negative dynamic operates between task difficulty and stereotype threat. When task is difficult, stereotype threat evokes concern over performance. But this concern so has a greater *impact* on the performance of difficult tasks. Difficult jobs require oncentration and focus; all of one's cognitive/mental resources must be directed ward accomplishing the work. If some of those resources are diverted towards orrying about one's skills and how one will be viewed by others, performance decreents occur (Beilock & Carr, 2005; Verbeke & Bagozzi, 2000). Thus, difficult tasks gger stereotype threat, and also are most affected by it.

In work settings then, difficult, complex, and challenging tasks are where ereotype threat is most likely to occur. This creates a dilemma for managers. Task fficulty is not just a fact in many (especially professional) jobs, it is a desired contion. For years, job design experts have recommended that every job contain some

challenging aspects to increase job involvement and avoid boredom and skill atrophy (Greenberg, 1996; Hackman & Oldham, 1980). In fact, giving demanding assignments to new hires is sometimes recommended as a good way to develop employees. Early demanding experiences predict later career success (Habermas & Bluck, 2000). In many organizations, "stretch" assignments (assignments for which an employee is not yet fully qualified, "stretching" the employee's skills and abilities) (McCauley, Eastman, & Ohlott, 1995) are used as developmental tools throughout a person's tenure (Noe, 1999). Stretch assignments are needed for skill development, but managers must be aware of the extra potential for stereotype threat these assignments might involve for stereotyped employees, and counteract this risk. (We discuss how managers might do this later in the paper.)

In addition, tasks that are new and unfamiliar to the person performing them may be more at risk for stereotype threat than routine, familiar ones. New employees in particular are likely to find task accomplishment challenging as they learn their responsibilities. Thus, managers also must be aware of the higher potential for stereotype threat for their new hires.

Personal Task Investment: How Important is this to Who I Am?

Personal task investment refers to how important doing well on the task is to the individual's self esteem and identity. Some employees strongly identify with a particular skill or competency as a part of who they are. We often hear people say, "I'm good with people," or "I'm a techie." For these people, the skill is a part of how they define themselves. For such invested people, doing well in that task domain is important for their self-esteem and for feeling good about themselves. Researchers have argued that people who are personally invested in the task would be most influenced by stereotype threat because they are the ones who really care about their performance (Steele, 1997; Steele et al., 2002). If you want your work performance to say something about you personally, then the prospect of being viewed in terms of a negative stereotype is most disturbing. Studies have consistently confirmed this. Those invested in the task are more negatively affected by stereotype threat than those without such personal task investment.

What does this mean, practically? People tend to be invested in tasks they are good at (Steele, 1997). So the heavy impact of stereotype threat on the personally invested means that "the most capable members of stereotyped groups tend to be the most adversely affected in their performance by stereotype threat" (Kray et al., 2002, p. 388). This carries an important reminder for managers: the employees who care about their work and really want to do well are generally the ones that a manager is least likely to worry about since they are the ones he or she thinks will succeed on their own, and thus don't need coaxing, coaching, or extra attention. Yet, these are the people *most* likely to be affected by stereotype threat, and therefore, most in need of a manager's efforts to address and reduce it. For example, a manager might think that because the talented Hispanic salesperson graduated at the top of his class, he's already proven that stereotypes don't apply to him and isn't bothered by them. Or that the efficient accountant who earned her CPA despite caring for four children no longer worries about not being taken seriously by male managers. But it's exactly these employees, the ones who have made a big investment in their work, who might be most likely to suffer the effects of stereotype threat.

The Context: Is this a Place Where Stereotypes Operate?

We've seen that the most important condition for stereotype threat is stereotype relevance: stereotype threat only occurs when the stereotype seems relevant to performing the task (Steele et al., 2002). In the academic research described earlier, stereotype relevance was created by the way the researchers described the tasks in a laboratory

setting. In work settings, the relevance of the stereotype for performance can also be signaled and reinforced by the diversity (or the lack of diversity) of people who are currently performing the job. Rosabeth Moss Kanter used the term "token" to describe individuals who are different from others on a salient demographic dimension—race, sex, or age (Kanter, 1977). Kanter and others have shown that tokens feel very "visible"—that they stand out from the rest of the group. In addition, those in the majority are more likely to view tokens in terms of their distinguishing characteristic: as *the* woman or *the* Asian. Because everyone (the tokens and the tokens' colleagues) is more aware of group memberships under these conditions, associated stereotypes are more likely to come to mind (Niemann & Dovidio, 1998). In addition, the numerical differences reinforce the relevance of the stereotype for performance in the setting. Consider the solitary woman in a team of software engineers. Being the "only one" suggests that the stereotype about women lacking quantitative skills is true, and therefore sex is relevant to job performance. After all, the reasoning goes, if "those people" were good at this kind of job, wouldn't we see more of them performing it? Two studies have provided evidence of the link between token status and stereotype threat. In one, laboratory experimenters found that token women showed lower performance than non-tokens only on a math task (a stereotyped domain) and not on a verbal task (a non stereotyped domain) (Inzlicht & BenZeev, 2003). In the other, field researchers found that Black managers who were tokens in their work group reported higher levels of stereotype threat than non-tokens (Roberson, Deitch, Brief, & Block, 2003).

Thus, group representation can raise the relevance of the stereotype for performance. Work situations involving lone members of a social or demographic group are common. For example, in the field research described above, 18% of the Black managers were tokens in their work group (Roberson et al., 2003). Managers need to be aware of this effect of the environment and find ways to neutralize it.

In summary, these conditions make stereotype threat more likely for members of negatively stereotyped groups:

- The employee is invested in doing well, on:
- A difficult, stereotype relevant task, where:
- The context reinforces the stereotype

When stereotype threat occurs, performance is disrupted. But the effects of stereotype threat go beyond short-term performance decrements. The Black managers who experienced stereotype threat in the field research said that they spent more time monitoring their performance (for example, by comparing themselves to peers) and were more likely to discount performance feedback that they received from the organization (Roberson et al., 2003). So, for example, a Black employee who is regularly exposed to stereotype threat about his intellectual ability might dismiss performance feedback from his White manager that would have helped him to meet organizational performance expectations and get on the promotion "fast track."

But maybe these responses are functional. If your manager holds a negative stereotype about you, maybe you *should* discount feedback from that person (or at least, take it with a large grain of salt). If you can't trust your manager, monitoring the performance of your peers might yield more credible information with which to assess your performance. And if stereotype threat causes people to work harder, couldn't that be a positive benefit? Earlier, we quoted Beyoncé Knowles as feeling like she had "something to prove." Beyonce has clearly been able to channel those feelings in a positive way in order to become a successful performer. Maybe a strong motivation to disprove a negative stereotype about your group can increase persistence and determination to succeed. Research on achievement goals has shown that a

desire to prove one's ability can be a powerful form of motivation (Elliott & Harackiewicz, 1996), most effective in improving performance and persistence on simple tasks that are familiar to the performer (Steele-Johnson, Beauregard, Hoover, & Schmidt, 2000; Vandewalle, 2001). If you know *how* to perform a task, this kind of motivation can help you to perform better. But remember the Black students in Steele and Aronson's research—the ones who spent a lot of time answering very few questions? Those students were very motivated, but they were working on very complex, challenging problems and their efforts did not pay off. This kind of motivation often works for you, but it can work against you.

Questions about whether employee responses to stereotype threat can be functional or potentially beneficial indicate that we need to know a lot more about the long-term consequences of repeated exposure to stereotype threat. To answer these questions, research has to study stereotype threat over time in real-world organizational settings. So far, the research suggests that repeated exposure to stereotype threat may have serious, and primarily negative, side effects. Stereotype threat is accompanied by physiological reactions such as an increase in blood pressure, leading researchers to speculate that long-term exposure to stereotype threat conditions might contribute to chronic health problems such as hypertension (Blascovich, Spencer, Quinn, & Steele, 2001). Stereotype threat is also associated with lower job satisfaction (Niemann & Dovidio, 1998; Roberson et al., 2003). Researchers have further suggested that repeated, regular exposure to stereotype threat may lead a person to disengage (or "disidentify") with the performance domain (Steele, 1997). That solo female in your engineering group may begin to think that an alternative career path might be preferable. This leads one to wonder whether long-term exposure to stereotype threat could be one cause of turnover for women and racial/ethnic minorities in professional and managerial jobs. Indeed, some studies have found that members of these groups leave jobs at a higher rate than White men (Horn, Roberson, & Ellis, 2007).

Fortunately, research on the conditions under which stereotype threat is most likely to occur also provides information about reducing the risk of stereotype threat. Recent studies have directly examined ways to reduce or eliminate stereotype threat by changing the conditions that produce the effect—in essence, interrupting the process. These studies are important because they point to some steps that can be taken by managers to lessen the possibility that stereotype threat operates for their employees. We now turn to specific strategies for reducing the likelihood of stereotype threat.

Interrupting the Stereotype Threat Process

Strategies for Reducing Stereotype Threat

We have mentioned that stereotype threat effects are strongest for people who are highly identified with the task domain. Researchers fear that over time, stereotyped people may find one way to reduce stereotype threat themselves—by disidentifying with the affected task domain. In other words, they break the psychological connection between their performance and their self-esteem so that doing well on that kind of task is less important. This is the only solution under the individual's control, but it is also perhaps the worst solution, costly for both the individual who gives up a valued part of the self, and for the organization that loses an engaged and motivated employee. Here we describe some alternatives to this worst case scenario—other strategies for reducing stereotype threat. These strategies, demonstrated to be effective in laboratory studies, all involve changing the conditions for stereotype threat. The strategies, and the points in the process at which they intervene, are shown in Figure 2.

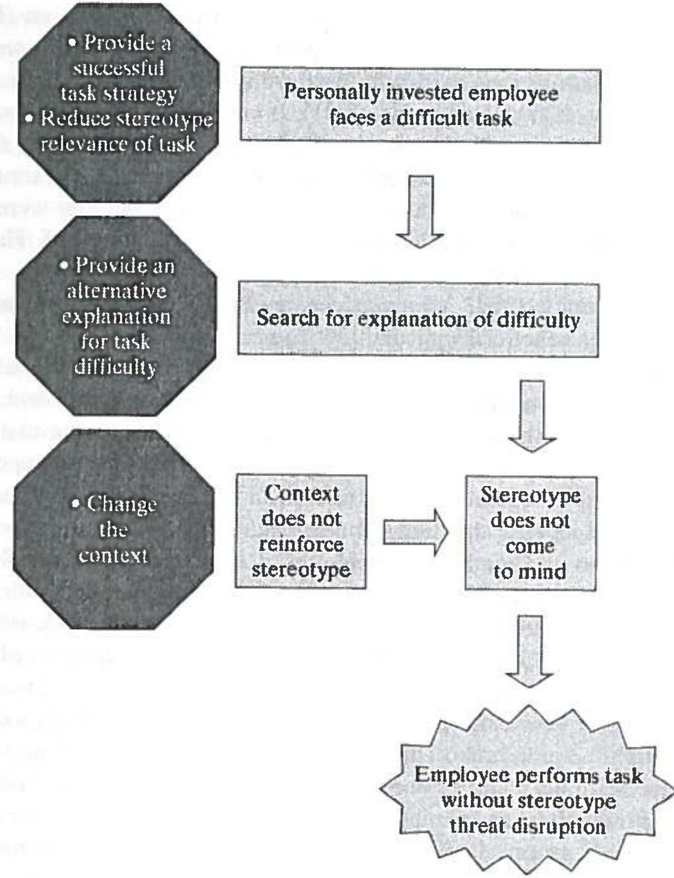

FIGURE 2 Interrupting the stereotype threat process

Provide a Successful Task Strategy

We know that stereotype threat influences people only on very difficult tasks—those at the outer limits of ability and skill. Evidence suggests that stereotype threatened people seek to distance themselves from the stereotype by acting opposite to it (Aronson, 2002). They often put their noses to the grindstone, work harder and longer to prove the stereotype wrong—to show it does not apply to them. In the original study by Steele and Aronson, stereotype threatened Black students worked harder and more diligently at the task, expending more effort than the unthreatened. Unfortunately, working harder and more carefully didn't increase performance. The task they were working on was extremely difficult, right at the outer limit of their abilities. Effort *alone* couldn't boost performance—what the students needed was an effective strategy for solving the problems.

A recent study provided stereotype threatened participants with a strategy to successfully counteract the stereotype. In a negotiation task, women were explicitly told about gender stereotypes suggesting that women are less assertive than men and tend not to act in their own self-interest; these characteristics reduce their effectiveness in negotiations. The women in the study were able to counteract the stereotype by acting particularly assertively when making opening offers to their partners, and this strategy improved their performance in the negotiation. However, the women acted this way only when they were *explicitly* told about gender's effect on negotiation. The women already knew how to act assertively—all they needed to perform

successfully was a cue that this context was one in which acting assertively was a good strategy (Kray et al., 2001).

This research suggests that one way to reduce stereotype threat is to teach affected employees behavioral strategies for improving performance and counteracting negative stereotypes. This intervention addresses task difficulty—one of the conditions for stereotype threat. Having good strategies available to cope with challenges makes the task seem less difficult and less frustrating. This research suggests that when using stretch assignments, managers should set goals, and also help employees develop strategies towards attaining them. The "sink or swim" attitude toward stretch assignments common in many organizations can be particularly detrimental for stereotype threatened individuals. If managers discuss and suggest task strategies to employees, stereotype threat should be reduced.

Reduce the Stereotype Relevance of the Task

We also know that stereotype threat happens when the stereotype is relevant to the task; when performance on a task is believed to reflect an ability or trait that differentiates stereotyped and nonstereotyped groups (e.g., women and men; Blacks and Whites). Several studies have eliminated stereotype threat effects by refuting or diminishing the stereotype relevance of the task. In one study, researchers asked men and women to take a difficult math test composed of items from the GRE exam. All participants were told that they were taking the math test as part of an effort to develop new testing procedures for the university. Half of the participants were also informed that this particular test had been shown not to produce gender differences—that men and women performed equally well. The other half were not given any information about gender differences. The researchers predicted that stereotype threat would operate when there was no information given about gender differences, because when labeled simply as a "math test," the gender stereotype that "women can't do math" would be relevant. However, being told explicitly that there were no gender differences would reduce the relevance of the stereotype to the task, and hence reduce stereotype threat. By presenting the test as one with no gender differences, the stereotype would be irrelevant to interpreting performance on the test. These results were confirmed: women underperformed relative to men in the "no information" (stereotype relevant) condition, but performed equally to men in the "no gender difference" (stereotype irrelevant) condition (Spencer et al., 1999).

Another study reduced the stereotype relevance of the task in a slightly different way, by emphasizing characteristics shared by both groups. Male and female college students participated in a negotiation exercise. For half of the participants, researchers made gender stereotypes relevant by saying that the most effective negotiators are "rational and assertive" rather than "emotional and passive" (cueing gender stereotypes). For the other half, researchers eliminated the relevance of the gender stereotype for performance. They told this half of the participants that "rational and assertive" people do better than "emotional and passive" individuals. But then they added, "people who are in competitive academic environments, like you, do exceptionally well in the negotiation. This is true for men and women alike." This description highlighted characteristics important for performance that are shared by both men and women, diminishing the stereotype relevance of the task. This strategy was also successful in decreasing stereotype threat and gender differences in performance (Kray et al., 2001).

These studies show that reducing the stereotype relevance of the task—one of the conditions for stereotype threat—is effective in removing stereotype threat. But is this a realistic strategy in organizations? In the laboratory, it is possible to label an unfamiliar task as one showing group differences or not. It is easy to manipulate

participants' beliefs about whether a task reflects group differences when those participants have no prior experience with the task. The situation is different with real world tasks or jobs where employees and co-workers may have strong opinions about the types of people who do well in various jobs or roles. Consider technical or mathematical tasks. Belief in gender differences on such tasks is widespread (Brown & Josephs, 1999), so when faced with a technical or mathematical task, a woman may not believe a manager who says it does not reflect gender differences. It might be more effective for managers instead to use the strategy in the second experiment. For example, rather than try to discredit gender differences, one could make gender differences irrelevant by stressing *common* characteristics of employees that are relevant for performing the task. This could be done by identifying characteristics important for task success that are unlinked to group stereotypes. Perhaps a manager could inform all employees that they were hired precisely because they have the skills needed to do well. For example, "We have such good hiring procedures—the people who we bring in, both men and women, have the skills to perform well."

Provide an Alternative Explanation for Task Difficulty

Task difficulty is a trigger for stereotype threat because people try to explain their difficulty to themselves: on a stereotype relevant task, where the context reinforces the stereotype, they are more likely to think of the stereotype as a potential explanation. The resulting anxiety and distress then disrupts performance. Several studies have shown that by giving an explanation for task difficulty *besides* the stereotype, stereotype threat can be reduced.

In one study, men and women students who came to the laboratory were told they would take a math test being developed by the psychology department for placement purposes. Immediately after this general description, half of the students were asked to begin the test, and were given 20 minutes to complete 20 problems. The other half were told that there would be a practice session before the test, administered on a computer. The experimenter explained that this would help them to "warm up," allowing a better assessment of their true ability level on the actual test. However, when the experimenter turned on the computer, the screen was unreadable (the computer had been rigged). After fiddling with the knobs and controls to no avail, the experimenter then announced that the students would have to take the test without the benefit of warming up, and this extenuating circumstance would be noted on their answer sheets. The researchers designed this study because they reasoned that being denied the "warm up" opportunity would provide a viable alternative to the gender stereotype as an explanation for any experienced task difficulty, reducing stereotype threat effects for women. Results confirmed this: men's performance was not affected by the test conditions. However, the performance of women was greatly affected. Women performed better on the math test when they were denied their "warm up" opportunity (Brown & Josephs, 1999).

In another study, researchers induced stereotype threat for White men by heightening the salience of the stereotype that Whites have less natural athletic ability than Blacks. The researchers then informed half of these participants that the lab space where they would perform athletic tasks had recently been renovated, and that the lab administration wanted "to know if the new changes made research participants feel tense or uneasy." Because of this concern, the participants would be asked to rate the lab space and its effects on their emotions after the experiment (Stone, Lynch, Sjomeling, & Darley, 1999). This information provided participants with another explanation (the renovated lab space) for any anxiety they experienced during the task. White men who received this alternative explanation for poor performance performed better than those who did not.

Again, however effective these manipulations are in the laboratory, their feasibility for the work setting may be limited. Managers certainly shouldn't lie to their employees (as in the first study) to give them an excuse for task difficulty and poor performance. But managers could remind employees about real-life factors that might be constraining their performance (e.g., a difficult client, limited resources, or a tight deadline). Another feasible strategy for providing an alternative explanation comes from a third study. The experimenters induced stereotype threat for women using the usual setup—telling participants that they would be completing a standardized math test for a study of gender differences. One group received just these instructions. With another group, in addition to these instructions, the experimenters described the phenomenon of stereotype threat and said, " . . . if you are feeling anxious while taking this test, this anxiety could be the result of these negative [gender] stereotypes that are widely known in society and have nothing to do with your actual ability to do well" (Johns, Schmader, & Martens, 2005: 176). These instructions had a positive effect on test performance. Women underperformed on the math test relative to men when given only the "math test" description. When stereotype threat was explained and offered as a possible cause of their anxiety, the performance of men and women was similar.

Telling people who might be affected by stereotype threat about the phenomenon has some advantages. Stereotype threat is real, and its effects on performance are well-documented. You might think that explicitly raising the issue of stereotype threat with a potentially affected employee might make matters worse by drawing attention to the stereotype—better to keep quiet and act like it doesn't exist. But instead the opposite appears to be true. Telling employees that you know stereotype threat can happen, and that they should be aware of it, gives them a different attribution for their difficulty and anxiety (it's not the stereotype, it's the stereotype *threat*).

Change the Context

The context is another condition that can affect the likelihood of stereotype threat. We discussed how one aspect of the context—the diversity of people performing the job—can reinforce or diminish the relevance of stereotypes. The research showing that tokens are more likely to experience stereotype threat also suggests a way to reduce stereotype threat: change the context by removing people from token situations.

This strategy may work in the laboratory, but how can managers realistically achieve this goal? In organizations, the composition of work groups is already constrained by employee skills, task interdependence, and other factors. Managers can't shuffle employees around based on their *demographics* to avoid token situations. However, several studies have changed the context using another strategy that does not involve changing the demographic make-up of the work group: presenting a role model who contradicts the stereotype. In one study, participants were administered a difficult math test by either a male or female experimenter. The experimenters gave identical instructions designed to accomplish two goals: 1) induce stereotype threat in the women by presenting the test as diagnostic of ability; and 2) create perceptions of the experimenter's competence in math. Scores on the math test showed that women underperformed relative to men only when the test was administered by a male experimenter. A follow-up study revealed that it was not the physical presence of the female experimenter, but rather her perceived competence that protected the women from stereotype threat. Seeing a woman who was competent in the math domain boosted women's beliefs in their own mathematical abilities and maintained their performance (Marx & Roman, 2002).

Other researchers found similar results when role models were presented in a different way. One study asked participants to read and critique four biographical

essays. Half of the participants read essays concerning successful women in a variety of fields such as medicine and law. The other half read essays concerning successful corporations. Then all the participants completed a math test administered by a male experimenter. Results indicated that the role model manipulation reduced stereotype threat: Women scored worse than men on the test when they had read about successful corporations, but women scored at the same level as men when they had read about successful women (McIntyre, Paulson, & Lord, 2003).

These studies suggest that managers may be able to change the context for stereotyped employees by boosting the salience and visibility of role models. Note that in the "essay" study, the physical presence of a role model was not necessary—what was important was that the competence of the role model was salient. This strategy could be feasibly implemented in organizations. Managers can increase access to role models by encouraging employee participation in mentoring programs, professional associations, and employee network groups (Friedman & Holtom, 2002; Friedman, Kane, & Cornfield, 1998). If managers maintain a diverse network of associates themselves, they can be more aware of potential role models for all of their employees, and attempt to connect people.

Implications for Diversity Management

Would a greater focus on reducing stereotype threat add anything new to diversity management? We think it would. Existing diversity management programs tend to have two major objectives (Kellough & Naff, 2004): One goal is to change managers' *attitudes*—to reduce negative attitudes, stereotypes, and prejudice against members of different groups. Much diversity training is geared toward this goal. A second related goal is to change managers' *behaviors*—how they select, appraise, and develop employees (Brief & Barsky, 2000). For example, managers are encouraged, and often required, to specify explicit behavioral and performance standards for promotion or advancement, and to adhere to these in making decisions. These are important objectives. However, these objectives ignore two realities. First, changing attitudes and reducing stereotypes is a long term endeavor. Stereotypes are embedded in the culture, and reinforced outside of the work setting (Brief, 1998). Until society changes, stereotypes about different groups will remain. Even if a particular manager is unprejudiced, others in the workgroup may not be, and employees may still feel stereotype threat. While we need to try to reduce stereotypes, in the foreseeable future we have to deal with existing attitudes, and try to reduce the *impact* of stereotypes on affected employees. Second, while increasing the objectivity of measurement and decisions is necessary, the presence of stereotype threat means that performance *itself* may convey biased information about a person's true ability. So the well-intentioned manager who relies on objective performance data without understanding the impact of stereotype threat will still unfairly underestimate performance. Focusing on stereotype threat takes these realities into account, and highlights two principles that are currently downplayed in most diversity management efforts:

1. **Acknowledge stereotypes and address them directly.** Unfortunately, the goal of eliminating stereotypes from organizational decision making sometimes leads organizational members to deny their existence. People sometimes confuse stereotype awareness with stereotype endorsement (Adler, 2002). Yet research has shown that even unprejudiced people are familiar with the content of common stereotypes and can easily describe what prejudiced people believe about members of certain groups (Devine, 1989). Putting our strategies into action means that a manager has to honestly acknowledge the stereotypes that exist. The manager who acknowledges the existence and potential impact of stereotypes does not have to endorse or support those stereotypes. Only a manager who acknowledges stereotypes can acknowledge the opportunity for stereotype threat and take corrective action.

   The strategies for reducing stereotype threat further imply that managers should talk explicitly about stereotypes with their potentially threatened employees (Kray et al., 2001). Rarely are stereotypes directly named and described—particularly to the affected parties. Although many people (managers and subordinates alike) might see this as a risky step, explicit discussion about stereotypes can be useful in reducing their impact. If supervisors and subordinates trust one another, it can be a good strategy. David Thomas' comparison of successful and plateaued non-White executives demonstrated that successful executives found mentors early in their careers who were able to talk directly about race and the challenges it presented (Thomas, 2001; Thomas & Gabarro, 1999). Such openness about the existence of stereotypes and stereotype threat provides employees with alternative explanations for task difficulty and also may decrease concerns that they will be judged in light of the stereotype. Many managers would shy away from such a frank discussion, but the evidence says that evasion is not always helpful. Honest engagement of the problem and an exploration of action strategies to counteract perceptions can increase trust, reduce stereotype threat, and improve performance. How can managers be encouraged to take these risks? Perhaps diversity training should focus on providing managers with the skills and confidence to talk about stereotypes with their employees.
2. **Shift the focus from the manager to the environment.** Diversity management programs tend to focus on the manager as the target of change. Diversity training programs, for example, are designed to change managerial attitudes and behavior (Bendick, Egan, & Lofhjelm, 2001). In contrast, the strategies for reducing stereotype threat focus on the *environment* as the target of change. In other words, changing the conditions that lead to stereotype threat. Managers need to attend to managing the environment and reducing the cues that signal to employees that stereotypes are operating.

Effective diversity management has always meant creating an environment where all can succeed (Cox, 1994; Thomas, 1991). Knowledge of stereotype threat increases our understanding of what that really means. It is more than being personally nonprejudiced and unbiased. It means actively reducing cues that limit the contributions of *all* employees. Only in this way can the benefits of diversity be realized.

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COMMUNICATING ACROSS CULTURES*

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All business activity involves communication. Within the global business environment, activities such as leading, motivating, negotiating, decision making, and exchanging information and ideas are all based on the ability of managers and employees from one culture to communicate successfully with colleagues, clients,

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