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Lazy, Dumb, or Industrious: When Stereotypes Convey Attribution Information in the Classroom

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Historically, ethnic minority children and girls have underachieved in American schools. This paper examines the role that stereotypes play in imposing obstacles to success for stigmatized children inside and outside of the classroom. Stereotypes convey explanatory information about groups—such as blacks are lazy, girls are bad at math, and so forth—that may be used as attributions for performance by adults as well as the children themselves. This paper presents a model that brings to light the underlying attributional structures of all stereotypes. Each of these attributional signatures has specific effects on judgments of responsibility and deservingness, help giving or punishment, self-esteem and motivation, and even performance inside and outside of the classroom. Through recognizing that stereotypes are vehicles for attributional judgments, educators are better able to anticipate the effects that stereotypes may have on students and take measures to counteract or diminish them.

KEY WORDS: stereotypes; attributions; causal judgments; discrimination; stigmatized students; attributions and achievement.

INTRODUCTION

Despite decades of reform efforts, academic underachievement in minority groups remains a challenge for American public schools and universities. African Americans and Latinos are more likely to have lower GPAs, receive lower scores on standardized tests, and are more likely to drop out

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of college or to never bother attending college compared to Caucasian students (Kuykendall, 1996). Similarly, despite evidence that women perform well in math courses and on mathematical tests, and in some instances, outperform men (Bridgeman and Wendler, 1991; Lummis and Stevenson, 1990; Yee and Eccles, 1988), women are two-and-a-half times more likely to drop out of quantitative areas such as math, engineering, and the physical sciences (Hewitt and Seymour, 1991).

Numerous factors combine to produce these achievement discrepancies, such as language barriers and low socioeconomic status among minority groups. One contributing factor that cannot be overlooked is the effect that subtle expectations and beliefs about groups can have on the way minority students are treated in the classroom. For example, teachers expect lower achievement from African-American youths than from Caucasians (Richman *et al.,* 1997; Williams and Muehl, 1978). Rubovits and Maehr (1973) have found that, in the classroom, African American students are given less attention and are ignored more than their Caucasian counterparts, regardless of the former's academic performance or gifted status. African American students also receive more negative feedback and mixed messages (Irvine, 1985). In the classroom, women also receive less total communication, praise, and feedback than do men (Irvine, 1985), especially in classes that are traditionally masculine, such as math and science courses (Deaux and Emswiller, 1974). Teacher expectations not only affect the way teachers treat students, but also strongly affect the academic self-image as well as the scholastic performance of students (Denbo, 1986).

Many of these widely held expectations toward students emanate from stereotypes about certain groups (Hamilton, *et al.,* 1990). Stereotypes represent a host of prepackaged expectations that have very real consequences for the beliefs and behaviors of both the user of stereotypes and for those being stereotyped. To understand the consequences that stereotypes may have in achievement settings, it is important to first examine the information that stereotypes convey and the ramifications of this information. This paper proposes that stereotypes provide a vehicle for making attributions about behaviors and performance; by viewing stereotypes through an attributional lens, one is able to better understand and perhaps predict the consequences of these beliefs.

CHARACTERISTICS AND FUNCTIONS OF STEREOTYPES

Stereotypes serve multiple functions (for reviews, see Ashmore and Delboca, 1981; Fiske, 1998; Hamilton and Sherman, 1994). At one level, stereotypes are *descriptive:* that is, stereotypes represent a coherent picture

of what a social category or group is like (Hamilton, 1980; Ashmore and Delboca, 1981). However, stereotypes also serve an *explanatory* function (Allport, 1954). Along with information about *what* a group is and does, stereotypes also provide information about *why* group members are the way they are or why they are in their present state.

One kind of explanation stereotypes provide concerns the cause of a particular state of affairs regarding a group. For example, the stereotype that ''Blacks are lazy'' is not just a putative description of African Americans, but it is an explanation of why African Americans are not successful in our society. ''Women are not good at math'' is a stereotype often invoked to explain why women are less likely than men to pursue math-oriented careers. ''Japanese are hard-working'' is one interpretation for Japan's economic success. Even a popular movie—*White Men Can't Jump*—has as a title a stereotype that is used to justify beliefs that Caucasians are not good basketball players. Stereotypes also provide ready-made explanations for individual acts performed by stereotyped group members. The same stereotypes listed above could also be used to rationalize an African American who loses his job, a girl who fails on a math test, a Japanese student who gets into a good college, or a Caucasian youth who does poorly in a sporting event.

The causal interpretations and explanations that are communicated through stereotypes can guide the way group members are treated. For example, many stereotypes—such as those of African Americans, Hispanics, and women—include negative attributes such as low intellectual ability. Low ability attributions have been linked with low expectancies for future success, which in turn may limit the opportunities that are offered to members of those groups because they are not deemed capable (Weiner, 1986). Stereotypes that sorority girls are promiscuous may undermine a sorority member's credibility as a victim of date rape because these stereotypes may make a jury more susceptible to accusations that she ''led the boy on'' or was ''a willing participant'' in the sexual encounter. Thus, assessing guilt or innocence, worthiness or unworthiness, capability or ineptitude, or deciding to help or to punish are decisions informed, and even justified, by the causal attributions conveyed in stereotypes.

In summary, certain stereotypes have the consequences they do because they convey attributional information that impacts the way stereotyped individuals are treated by others as well as the way those being stereotyped perceive themselves. This paper provides an analysis of stereotypes as attributional agents and presents a model that explains how the stereotype–attribution link affects (1) the self-esteem and motivation of the stereotyped, (2) people's attitudes and behaviors toward stereotyped group members, and (3) how both play out in achievement settings. Finally,

I discuss how this method of conceptualizing stereotypes may provide interventions for minimizing the effects of stereotypes in the classroom.

VIEWING STEREOTYPES THROUGH AN ATTRIBUTIONAL LENS

Although the content of stereotypes varies, the causal components associated with stereotypes are the same. Like any other attribution, the attributions communicated by stereotypes fall into a general, three-dimensional taxonomy: locus of causality, controllability, and stability (Weiner, 1986). According to attribution theory (Weiner, 1986), causes can be internal or external to the target of judgment, where internal refers to causes that are rooted in something about the person (e.g., traits, behaviors), or they can be rooted in something outside the person (external, environmental agents). The second dimension, the controllability of the cause, refers to causes either controllable by the actor (like laziness or hard work, deviant or prosocial behavior, etc.) or not (e.g., innate abilities, external causes, etc.). This dimension plays an important role in this analysis because controllability attributions are consistently among the strongest predictors of how a person is treated by others. Finally, there is the stability dimension, wherein causes are perceived to persist across time (stable) or to be short-lived or labile (unstable). Stability attributions play an important role in predictions and expectations for future behavior.

For example, if a person is not successful because of low intelligence, this cause would be deemed internal to the individual, uncontrollable by him or her, and most likely stable if it reflects a congenital state. On the other hand, laziness is also internal to the actor and somewhat stable, but is considered controllable by him or her. Therefore, the causes of low intelligence and laziness are identical on two dimensions of causality (internality and stability), but different in the property of controllability. Conversely, if a person is unsuccessful because s/he is a member of an underprivileged group, the cause of the poor success would be external to him or her, uncontrollable, and probably stable. Being underprivileged differs from low intelligence and laziness on two dimensions of causality (internality and controllability) but is identical in its stability.

AN OVERVIEW OF THE MODEL

Following is a brief overview of the model proposed in this paper, which maps out the social and personal consequences of stereotypes based on their attributional signatures. This model is presented in Fig. 1.

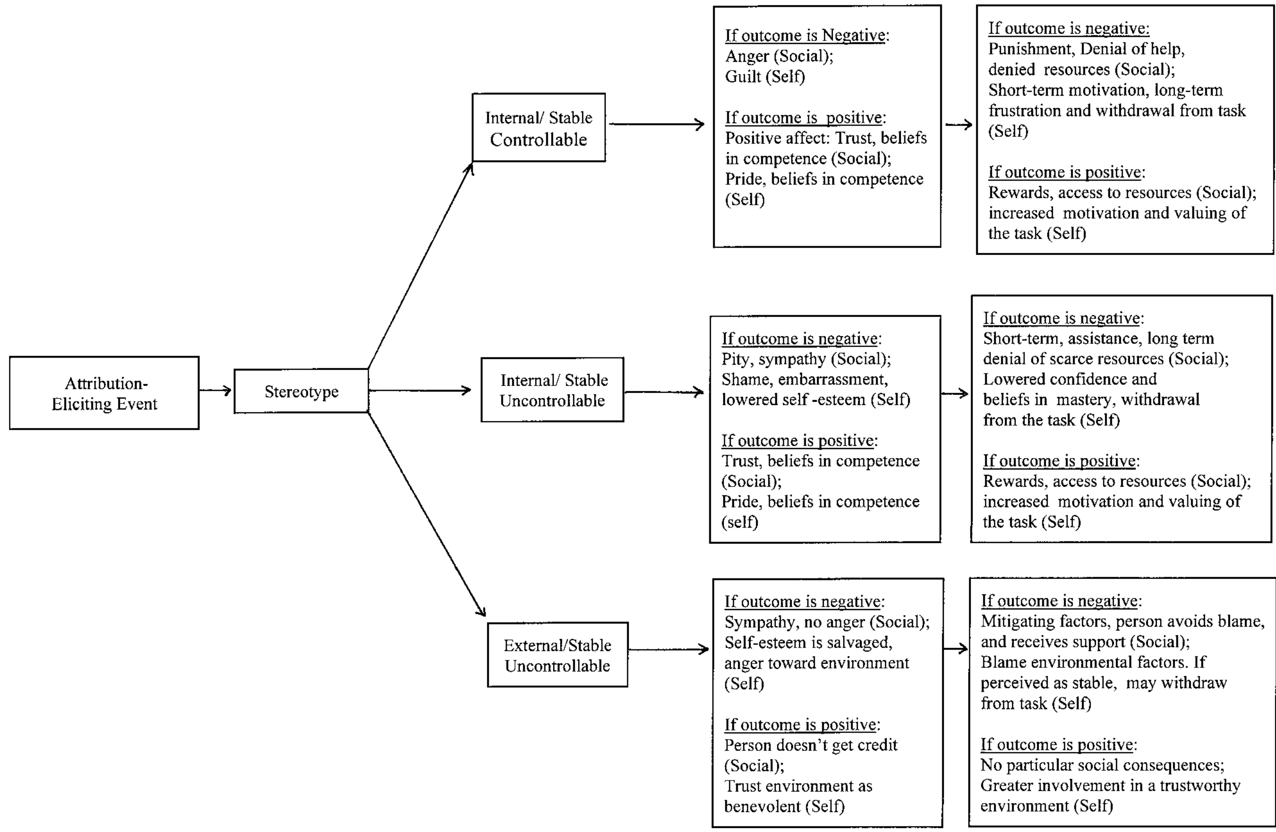

Fig. 1. The types of attributions communicated through stereotypes, and the consequences of these attributions on self and social judgments.

The process begins with a stereotype-eliciting event. This event could be an unusual or unexpected occurrence—like a woman getting the top score in a math class—or it could be an event that caters to expectations, like an Asian getting the top score in a math class. The event could grab attention—like a news exposé on welfare mothers exploiting social services—or it could almost go unnoticed—like the news exposé that disproportionately airs images of *Black* welfare mothers. Also, a stereotype-eliciting event does not have to be a discrete moment in time, but can be an ongoing situation or behavior. For example, the knowledge that certain ethnic minority groups are more likely to be unemployed or to hold lower paying jobs may make certain stereotypes regarding those group members' work ethic or capabilities chronically accessible in memory. In sum, a stereotype-eliciting event could be any type of event that motivates some form of social- or self-judgment or evaluation.

Once a stereotype is invoked, all the implications of that stereotype are simultaneously activated, including the causal implications that are packaged in the stereotype. Thus, when a stereotype gets activated, the causal explanations that the stereotype implies are activated as well.

The Unique Attributional Signatures of Stereotypes

The causal explanations associated with stereotypes are not uniformly represented by all three attribution dimensions. To begin with, stereotypes represent qualities about an individual or group that are relatively stable across time. Also, most, but not all, stereotypes represent attitudes, behaviors, or characteristics that are deemed internal to the individual or group. For example, being smart, stupid, good at math, fanatical, rhythmic, and racist are all stereotypical depictions whose locus is internal to the target of the stereotype. However, there are notable exceptions to this rule. For example, one stereotypic explanation for the poorer performance of ethnic minorities in college is that Blacks and Mexicans went to "ghetto schools"—which are notoriously underfunded and poorly staffed. Funding for schools is determined by city and state governments, which suggests an environmental (i.e., external) culprit. Finally, stereotypes vary considerably along the third dimension of controllability. Stereotypes can be uncontrollable by the stereotyped individual (e.g., being smart, stupid, uncoordinated, naturally athletic), whereas many are controllable by that target person (e.g., being lazy, industrious, stingy, promiscuous).

Given these unique properties of stereotypes, this model proposes that the attributions conveyed through stereotypes always represent one of three patterns: Stereotypes can communicate causes that are (1) internal/stable/

controllable by the stereotyped person (e.g., laziness), (2) internal/stable/uncontrollable by the stereotyped person (e.g, low intelligence), and (3) external/stable/uncontrollable by the stereotyped person (e.g., being the victim of discrimination).

Each attributional signature is associated with specific emotions and behavioral responses following either desirable or undesirable events. For example, the uppermost path in Fig. 1 depicts stereotypes that represent internal, stable, and controllable behaviors or characteristics. If the eliciting event was negative—e.g., a Mexican American student who failed an exam—then the stereotype (Mexicans are lazy) conveys internal, stable, and controllable attributions that would result in negative social reactions (anger, blame, denial of help and future opportunities) and perhaps self-blame by the failing student. If the eliciting event is positive—e.g., a Chinese student gets the top score on a difficult assignment—then the stereotype (Asians are hardworking) implies internal, stable, and controllable attributions that would result in positive emotional and behavioral consequences from both the teacher (more confidence and trust in the student, giving the student rewards and opportunities) and the student (pride, increased motivation toward, and valuing of, the task).

Stereotypes that convey internal, stable, and uncontrollable causes have a different set of consequences. For example, if a girl does poorly on a math test, the stereotype, ‘‘Girls are bad at math,’’ implies that the failure is due to something chronic and uncontrollable about her (namely her low math aptitude). Forming this judgment about the girl will likely elicit sympathy and some assistance. However, she may eventually be neglected and denied opportunities relevant to math if her inability is deemed inalterable. If the girl is exposed to the stereotype, she could suffer feelings of shame and lowered self-esteem in that domain. Over time, this could cause her to withdraw from mathematical tasks. Figure 1 also outlines the consequences of stereotypes that convey internal, stable, uncontrollable attributions (e.g., stereotypes that imply natural skills) following a positive event.

Finally, the model outlines the consequences of stereotypes that remove responsibility from the stereotyped person—namely, stereotypes that communicate *external* attributions. According to attribution theory, externally located causes are, by definition, uncontrollable by the individual (Heider, 1958; Weiner, 1985); therefore, these stereotypes imply external, uncontrollable, and stable causes. For example, if the stereotype elicited by the failing African American is that ‘‘Blacks are underpriveledged,’’ the stereotyped individual is absolved from responsibility for his or her plight. In this case, others will respond with sympathy and will be more likely to assist. This stereotype also protects the self-esteem

of the individual being stereotyped. On the downside, it does nothing to improve the stereotyped individual's trust that his/her environmental obstacles will be lifted.

THE ATTRIBUTIONAL CONSEQUENCES OF STEREOTYPES IN ACHIEVEMENT DOMAINS

It is important to begin with a discussion of the ramifications of stability attributions. This model asserts that all stereotypes imply stable qualities about a person; therefore, understanding the unique consequences of stability attributions will establish a foundation upon which the attributional features of stereotypes are built. Subsequent sections discuss the three attributional signatures of stereotypes in more detail and elaborate cognitive, emotional, and behavioral consequences of these implied attributions and how they might play out in the classroom and in other achievement-related settings.

Stereotypes and Causal Stability: Expectations, Motivation, and Opportunities

One of the fundamental functions stereotypes serve is that they allow an individual to simplify and anticipate an otherwise overwhelmingly complex social environment (for reviews, see Ashmore and Delboca, 1981; Fiske, 1998; Hamilton and Sherman, 1994). Stereotypes are beliefs about the nature or quality of a person or group that are summarily applied to group members and are thought to reflect predictable characteristics and behaviors of that group (for discussion and review, see Fiske, 1998). If stereotypes are to serve any simplifying or predictive function, they must have a notable degree of generalizability across many group members in many contexts, and the attributes and behaviors described by the stereotype must be relatively reliable across time.[3] When people say ‘‘Blacks are lazy,'' they are not saying that after diligently working on homework all afternoon, African Americans like to relax and not do their chores. Rather, they are asserting a belief about a fundamental trait of African Americans that is resilient across time and perhaps even situations. To the stereotyper, this is what it means to be Black. It is true that stereotypes may vary in the

[3]Stability here refers to a presumed quality of the characteristics of a group, and not the stability of stereotypes *per se.* It is certainly the case that individuals' stereotypes may change over their lifetimes, and even that the content of stereotypes may change with changes in society. However, while a stereotype is held, this stereotype represents attributes that are considered stable within the individual or group being stereotyped.

degree of implied stability (e.g., controllable stereotypical behaviors may not be as wholly unalterable as congenital conditions) but they are still deemed chronic.[4]

Research on stereotype consistency and attributions has also lent support to the notion that stereotypes are perceived as stable, internal characteristics (e.g., Jackson *et al.,* 1993; Yarkin *et al.,* 1982). In a meta-analysis of gender-stereotypical judgments, Swim and Sanna (1996) found that when targets were successful on stereotype-consistent tasks (masculine tasks for men, feminine tasks for women), success was attributed to internal, stable qualities, such as ability. However, success on stereotype-inconsistent tasks was attributed to unstable factors, such as extreme effort. Jackson, *et al.* (1993) have found a similar pattern with racial stereotypes in academic judgments. Participants in their study reviewed either strong or weak college applications. Applicants were depicted as either African American or Caucasian. Participants evaluated the applications and rated, among other things, their attributions for the applicants' performance. Results indicated that participants were more likely to attribute an African American's scholastic success (a stereotype-inconsistent event) to unstable causes like effort, and to attribute poor scholastic performance (a stereotype-consistent event) to stable causes like low ability. The opposite pattern was found for whites, whose academic success is stereotype-consistent: White's success was attributed to high ability (stable) and their poor performance to low effort (an unstable cause).

There are definite cognitive and emotional consequences associated with beliefs about stability. Stable acts are perceived as difficult to extinguish and reliable across time (Anderson *et al.,* 1994). They are associated with less hope for change and high expectations for the continuation of a behavior or state of being (Anderson and Jennings, 1980; Forsterling, 1985, 1988). These expectations, in turn, affect how a person exhibiting this behavior is treated, and they affect the opportunities allotted to these people. These expectations are especially influential in achievement environments. If the stable behavior is positive, these individuals are deemed reliable in that domain, trusted more in that domain, and allowed access to opportunities that are relevant to that domain (Anderson *et al.,* 1994; Carroll, 1978; Carroll and Payne, 1976). For example, stereotypes that boys are smart at math (a stable quality) may make boys' knowledge of math deemed more

[4]An important distinction must be made between stability and globality—i.e., whether the cause is transsituational (Abramson, *et al.,* 1978). Just because a stereotype implies stability does not mean that stereotypes cannot be situationally constrained. For instance, the stereotype that women are less capable at math does not indicate that women are less capable across all academic domains, just in instances requiring mathematical or logical reasoning skills. But in this domain they are perceived as chronically inferior. Although the stereotypes might be situationally bound, within their sphere of relevance, they are treated as stable.

reliable by their fellow students; therefore, boys may be approached more by peers for assistance in mathematics. These beliefs in ability may also impact teachers' perceptions as well. If teachers expect boys to perform well, they may be more likely to call upon boys in class, especially with regard to challenging questions (Lundeberg, 1997; Sadker, 1999).

Stable, negative qualities also have their psychological consequences. A negative attribute that is deemed stable will elicit a chronic distrust in the person in relevant domains, will lead to lowered expectations for success, and will yield fewer opportunities in those domains. For example, despite the fact that colleges around the nation have a number of programs to promote women in the math and sciences American Association of University Women [AAUW], 1998), there is still a huge gap in the number of women who are hired for positions that require mathematical or logical skills, especially in technological domains (AAUW, 1998; Piller, 1998). Even in white-collar positions, like business, pervasive distrust in women's long-term capabilities has kept the glass ceiling intact (e.g., Ruble *et al.,* 1984).

The Effects of Stereotypes and Stability Attributions on the Self

Attributions of stability also have psychological and behavioral consequences for the person being stereotyped. As previously mentioned, stability attributions are associated with expectations for future outcomes (Weiner, 1985). If a person is experiencing positive outcomes due to a stable cause, he/she can expect the cause to continue producing desirable results. However, if negative outcomes are attributed to stable causes, then those causes are expected to continually undermine success. As a result, stable causes that produce desirable outcomes are associated with hope for future success and continued motivation to achieve success in that domain (Anderson, *et al.,* 1994). On the other hand, stable causes that produce failure are associated with hopelessness and a withdrawal from the task or domain in which the failure is occurring (Abramson, *et al.,* Alloy, 1989; Anderson, 1983; Weiner *et al.,* 1978, 1979).

Attributions of stable causes to failure (especially internal, stable causes like ability) have been associated with decrements in performance on tasks (Dweck and Leggett, 1988; Fosterling, 1985; Wilson and Linville, 1982, 1985). A number of studies have investigated the effects of certain attributional styles on long-term expectation and achievement (e.g., Chandler and Spies, 1992; Henry, *et al.,* 1993; Peterson and Barrett, 1987). For example, Henry *et al.* (1993) found that students who made internal, stable attributions for failure (ability) and unstable attributions for success (effort

or luck) performed worse in a computer science class than students who had an optimistic attributional style (i.e., seeing success as due to ability and failure as due to low effort—an unstable cause). On the other hand, retraining students to attribute failure to unstable factors (like effort), shows the most dramatic increases in performance and motivation compared to other retraining techniques (Forsterling, 1985).

In the context of stereotypes, groups who are pegged as having undesirable, stable qualities (like low ability) have to constantly cope with the threatening implications of those stereotypes—namely, low expectations and hopelessness. Individuals who succumb to the implications of those stereotypes often lose motivation and interest in domains impacted by the stereotype. For example, women who succumb to stereotypes that they are poor at math are more apt to loose interest in mathematical tasks and to withdraw from them (Meece, *et al.,* 1990). In addition, women are more likely to display negative and helpless attribution styles (attributing failure to stable causes), especially in domains at which women are stereotypically bad, such as math (Dweck *et al.,* 1978; Eccles *et al.,* 1984; Eccles *et al.,* 1983; Parsons *et al.,* 1982).

African Americans or Latinos, who are stereotyped as having low intellectual ability (an internal, stable attribution), may eventually lose interest in academic domains, especially if they are experiencing difficulty (Major, 1995). Ethnic minorities are more quick to lose interest and motivation on tasks in which their group is stereotypically portrayed as poor performers (Crocker and Major, 1989; Steele, 1997/8; cf. Major, 1995). For example, African Americans who are doing poorly in school (an outcome consistent with the stereotype) are more likely to disengage from academic tests than are whites and African Americans who are doing well. It is at these moments of doubt—a difficult exam, a less than desirable grade, a challenging day at the office—wherein people are most vulnerable to the negative attributions made hypersalient through years of being stereotyped (e.g., Steele, 1997/8; Steele and Aronson, 1995).

Retraining members of stereotyped groups (such as women) to redirect their focus away from the stability attributions implied by stereotypes and toward unstable attributions improves persistence and performance on tasks in which they are portrayed as stereotypically inferior, such as in math (LaNoue and Curtis, 1985; Reid and Block, 1997).

THE THREE ATTRIBUTIONAL SIGNATURES OF STEREOTYPES

As mentioned earlier, when an event invokes a stereotype (like failure on a test, or disruptive behavior on the playground), that stereotype will

provide attributional information that may bias a person's interpretation of that event. The attributional information conveyed through stereotypes falls into one of three patterns discussed in the following sections.

Stereotypep That Imply Internal, Stable, Controllable Attributions

Mexicans are lazy. Whites are bigoted. Jews are stingy. Irish drink a lot. Housewives like to gossip. Sorority girls are promiscuous. Arabs are fanatical. French are rude. Asians are hardworking. Women are compassionate. These are just some of the many stereotypes that, when used as explanations for behaviors or states of affairs, imply internal, stable, controllable causes. In the classroom, relevant stereotypes involve groups (like ethnic minorities) that are pegged as lazy or trouble-makers, or they can involve groups that are labeled as hardworking, such as Asians and Jews.

The stereotype of certain ethnic minorities being lazy may be a proclamation of an internal, chronic behavior pattern; but additionally informative is that this undesirable pattern is under the volitional control of the stereotyped individuals. The stereotype implies that these people don't *have* to be lazy, but they *choose* to be. This is frowned upon as a violation of societal norms, and is often responded to with disdain, condemnation, and punishment (Weiner *et al.,* 1997).

An observer's (parent's, teacher's, etc.) stereotypical ascription of an action, attribute, or lifestyle to a cause controllable by a student, such as failure at an exam because of not trying, gives rise to the inference that the student is to blame for the negative outcome (see Weiner, 1995). The more personally involved the observer, the more an inference of a student's responsibility for a negative outcome (generated by the stereotype) generates anger in the observer (Weiner, 1985, 1995), which catalyzes the observer to respond in a rejecting, punitive, or even retaliatory way toward the student (Weiner, 1995; Weiner *et al.,* 1997). Hence, teachers are angry at the Latino students who fail because teachers may think that they are lazy and don't care about education; thus teachers are likely to condemn and criticize these individuals and not offer assistance to ameliorate their negative plights (Darley and Zanna, 1982; Fincham and Jaspers, 1980; Weiner *et al.,* 1997). High school teachers report that they are more likely to punish a child (e.g., give detention, scold the child, ignore the child) if they think the child failed a test because they did not bother to study (a controllable reason), and to offer tutoring, make-up work, and other forms of assistance for children they think failed for uncontrollable reasons, like low aptitude (Reyna and Weiner, 1998). Stereotypes are an unconscious vehicle for causal ascriptions that may inadvertently affect the amount of blame, and

thus the amount of assistance, offered to students who come from groups stereotypically labeled as lazy or troublesome.

On the other hand, stereotypes may benefit other pupils who come from groups protected by the mantle of positive labels. When the stereotype implies that people are in control of positive outcomes, they, too, are held responsible; but the emotional reactions toward them are positive—such as trust, gratitude, beliefs in competence, and so forth—and the students are more apt to receive rewards and accolades (Weiner, 1985, 1993). Being in control of positive outcomes is just as telling of a person's character as is being in control of undesirable ones. Weiner and Kukla (1970) have found that pupils described as trying hard (a positive, controllable behavior) were given more accolades for success and less punishment for failure than students who succeeded or failed for any other reasons.

One notable example of the relationship between positive stereotypes and positive reactions to stereotyped group members is that of the "model minority"—Asians. One stereotype of Asians is that they are hardworking. In fact, Asians are considered a "model minority" in the United States because, despite discrimination, they worked hard to get ahead in society and have largely succeeded (Kitano and Sue, 1973; Sue and Kitano, 1973). This interpretation of the Asian experience is based more on the stereotypes that Asians are hardworking than it is on other Asian stereotypes (such as Asians being good at math, or Asians being communal). Thus, a stereotype that communicates positive, controllable characteristics can have a very strong impact on the attributional beliefs surrounding the behaviors of those group members, just as negative stereotypes can.

Implications of Internal, Stable, and Controllable Attributions on Self-Judgment: Pride and Guilt

Stereotypes that imply internal, stable, and controllable characteristics and behaviors can be both informative and, in some instances, harmful to those being stereotyped. Stereotypes that imply controllability over positive outcomes—such as Asians are hardworking, men are practical—can produce feelings of accomplishment and competence in the student (Graham, 1991; Weiner, 1985), and will likely lead to increased pride in, and valuing of, a task at which they perform well (Weiner, 1985). These stereotypes communicate that the stereotyped group member is in control over desirable events. According to attribution theory, mastery-oriented beliefs (i.e., beliefs that an outcome is controllable by the person) are likely to motivate an individual to continue striving, developing, and using the qualities that produced this success (e.g., hard work) (Weiner, 1985).

What happens when a stereotype implies that a negative outcome could have been avoided by the stereotyped individual? According to attribution theory, individuals who feel responsible for negative outcomes should experience a burden of responsibility and feel guilty, wondering, after every undesirable event, if there was something more they could have done to produce a better outcome (Weiner, 1985, 1995). Guilt, in attributional terms, is considered a motivating emotion. If a person is in control of actions and behaviors that produce negative outcomes (like failure), then logic suggests that, if they employ new strategies, they can improve their outcomes. This is one technique used by attribution-retraining therapists: Get students to believe (e.g., through feedback) that their scholastic outcomes are controllable by them—that outcomes are effort based (which is controllable and unstable), vs. ability based (uncontrollable, stable) or luck based (uncontrollable and unstable)—and they will be more likely to persist at challenging tasks (Andrews and Debus, 1978; Dweck, 1975; Forsterling, 1985).

Whether or not this occurs for stereotyped individuals is another issue. In terms of day-to-day life, the impact of internal, stable, and controllable stereotypes probably is not entirely motivating because, as we mentioned earlier, all stereotypes imply qualities or states that are chronic. Thus, these stereotypes may burden some groups with a constant need to question their strategies every time a negative outcome occurs. Although this could have positive, motivational consequences in instances when their strategies are not functional, in instances when the burden of responsibility lies outside stereotyped individuals (e.g., not doing well in school because of poor resources or discrimination), self-directed blame and responsibility would be futile, unproductive, and ultimately harmful. In addition, these stereotyped individuals are more likely to be entrenched in an unsupportive and even hostile environment if they are members of groups associated with stereotypes that communicate negative, controllable attributions (Weiner, 1991). The deleterious effects of persistent blame and rejection would no doubt outweigh any progress made by increased motivation to succeed.

Stereotypes that Imply Internal, Stable, Uncontrollable Attributions

There are some stereotypes that suggest a trait, attribute, or behavior is beyond the person's control. Jocks are dumb. Old people are senile. Women are weak. Irish are lucky. Asians are good at math. Germans are logical. Whites have no rhythm. Gays are feminine. And so on. In the classroom, these stable, characterological attributes that are outside of the student's volition are a double edge sword that can ultimately do the most

damage to a student's motivation and self-image than any other kind of stereotype.

On one hand, negative outcomes or actions that an observer can ascribe to uncontrollable causes (which indicate that the student had no freedom to act otherwise) often elicit sympathy or pity, and prosocial behavior toward the actor (Graham, 1991; Weiner, 1995). We tend to feel sorry for the girl failing the math exam because of perceived low aptitude, or the Asian kid who we think is not successful in sporting events because of low coordination or physical prowess. Thus, we may offer them social support or engage in other prosocial activities to help them, like giving the girl special tutoring in math or letting the Asian kid play on a less challenging position on the team (Graham, 1991; Harvey, 1986).

Although this initial assistance may benefit the child in the short term, and the attribution may absolve the student of responsibility for the negative outcome, this attributional pattern will ultimately reduce a teacher's confidence in the student and the student's confidence in him- or heself. Students who must contend with stereotypes suggesting that they have low aptitude, or other undesirable congenital conditions, have no way of escaping negative outcomes according to these stereotypes (remember, they are uncontrollable and stable). Although people may feel guilty for failing because they did not try hard enough, those who fail because of lack of aptitude feel embarrassed and ashamed (Graham, 1991; Weiner, 1985, 1994). Negative outcomes that are beyond the persons control have also been linked to feelings of incompetence (Weiner, 1985; 1994), helplessness, and depression (Anderson, *et al.,* 1994).

Furthermore, attributing failure to internal, uncontrollable causes, especially when they are also stable (as stereotypes imply), not only can impair pride and self-esteem, but these pessimistic attributions can also reduce expectations for future success and ultimately decrease motivation in the unsuccessful domain (Chandler and Spies, 1992; Peterson and Barrett, 1987; Henry, *et al.,* 1993). Peterson and Barrett (1987) found that college freshmen who make internal/stable attributions for failure (low ability) were more at risk for future poor grades than those students with less pessimistic explanations for failure. Henry *et al.* (1993) found that the use of ability attributions (whether they were used to explain success or failure) was one of the strongest predictors of course grade in a computer science class.

Because stereotypes often reflect qualities internal to, and uncontrollable by, the individual, an individual who is stereotyped is vulnerable to these self-esteem threatening attributions. If a girl does poorly in her math class, or if an ethnic minority is experiencing difficulty in an English class, pervasive societal beliefs that imply these undesirable outcomes are due

to something about the student's character or ability may damage the student's self-esteem (Abramson, *et al.,* 1978; Dweck, 1975; Dweck *et al.,* 1978). Several researchers (e.g., Bar Tal, 1978; Eccles *et al.,* 1983, 1984) have found that women are more likely than men to attribute success to external or unstable factors (such as luck or effort) and failure to internal factors (like low ability). This is especially the case with tasks at which women are stereotypically portrayed as bad, such as math (Eccles *et al.,* 1983, 1984). No doubt these attributional styles are rooted to some degree in the pervasive stereotypes these girls have had to contend with since childhood (Eccles *et al.,* 1990; Jacobs and Eccles, 1992).

There is an association between being a member of a stereotyped group and underperforming on the tasks your group is most devalued in by stereotypes (e.g., Eccles *et al.,* 1983, 1984). Steele and his associates (Steele and Aronson, 1995; Spencer and Steele, 1995) have demonstrated that, for members of stigmatized groups, the mere threat of being negatively stereotyped for a potential failure can actually impair performance on academic tasks. This effect has been labeled "stereotype threat." In one study, Steele and Aronson (1995) subtly reminded African American students about their stigmatized status right before taking a test in a domain at which African Americans are stereotypically seen as not proficient. Other students were not reminded of their stigmatized status. They found that when African Americans were made to think about their stigmatized status, they underperformed relative to whites; however, if their stigmatized status was not made salient, they performed equally well as whites. Stereotype-threat effects have also been demonstrated with Mexican-Americans (Salinas and Aronson, 1997) taking academic tests and with women taking math tests (Spencer and Steele, 1995).

According to the model proposed here, one way in which stereotype salience can impair performance is through the communication of attribution information. As previously discussed, stereotypes communicate prepackaged, easily accessible attributions—such as internal, stable, uncontrollable attributions like low ability—that pose a threat to self-esteem and self-concept. This challenge to self-esteem and self-concept may in turn affect short-term cognitive functioning–through cognitive interference, and the increased motivation to engage in cognitive repair strategies—as well as long-term motivation. Thus, it is not the threat of being negatively stereotyped per se that is so detrimental to academic performance, rather it is the threat of being stereotyped as having low aptitude—an internal, stable, and uncontrollable ascription.

Recent studies that have attempted to attenuate stereotype-threat effects by altering attributions provide preliminary evidence that an attributional mechanism may be involved. Reid and Block (1997) altered women's

attributions for success on a difficult math test by promoting either performance attributions (ability oriented attributions) or learning attributions (effort oriented attributions). They found stereotype-threat effects for the group given ability-oriented attributions (i.e., these women performed poorly compared to men). However, these effects were eliminated in the effort conditions, where men and women performed equally well. Once again, stereotype threat is present when the likelihood of ability attributions increases, but it vanishes with the elimination or reduction of ability attributions.

In a recent review of the stereotype-threat literature, Steele (1997) also pointed the finger at ability attributions as the vehicle behind stereotype threat (although he has yet to conceptualize stereotype threat in attributional terms).

> To help anticipate our argument, consider a student about whom there exists some suspicion of lesser ability. . .. The gist of his predicament is that whenever he has a relevant failure, the suspicion he is under poses the disturbing interpretation that it is due to a lack of ability. Being under this threat constitutes an extra burden in circumstances where that ability is exposed to judgment. (Steele, 1997)

On the other hand, stereotypes that certain group members are very capable in a domain (e.g., Asian and men are good at math, African Americans are good at sports) should increase the likelihood of positive, internal attributions (e.g., high ability), thereby maintaining or bolstering pride, self-esteem, and perhaps motivation in those domains. Evidence for this can be found in literature on the selective valuing and devaluing of stereotype-consistent domains. One way members of groups maintain self-esteem is to place more value on the domains in which their group is stereotypically perceived as successful, and to devalue or disidentify with those domains at which their group is stereotypically not good (Crocker and Major, 1989; Major, 1995). For example, both college men and women express that academic performance (a stereotypically male domain) and social interactions (a stereotypically female domain) both contribute to their self-confidence. However, both men and women place more value on the domain in which their group is viewed as stereotypically more competent (Shrauger and Schohn, 1995), thereby boosting their self-esteem through the belief that they have special talent in valuable arenas. It is interesting to note that the ability to selectively value and devalue domains based on competence is associated with level of self-esteem (e.g., Harter, 1986).

Stereotypes that Imply External Causes: Salvaging Self-Esteem and Avoiding Blame

Some people believe that, in our society, African Americans and Latinos (as a group) are not as successful as whites because they are lazy or

inept, whereas others believe that these groups are underprivileged by a racist society that impedes their potential success. All three causal ascriptions are stereotypes. As this example illustrates, some stereotypes suggest the cause of desirable or undesirable outcomes may lie outside the individual being stereotyped. Some people believe that most ethnic minorities and women are underprivileged and that they attend underfunded schools with poor resources, whereas many whites are given undeserved opportunities or benefit from schools that receive extra funding. These beliefs represent external attributions for success or lack of success that prevent one from getting credit for accomplishments and absolve others of responsibility for failure.

External Attributions for Undesirable Outcomes: Helping the Underpriveledged

External attributions remove responsibility from the individual and place it on factors outside the individual's control. As a result, the individual is not to blame for negative outcomes, and deserves sympathy and assistance (Weiner, 1993). In short, it is not their fault. Those who hold stereotypes that the cause of a negative state is external to the individual or group will not blame group members for this state, but instead will feel sympathy and compassion and will be more likely to assist them or support programs that offer assistance to ameliorate their unfortunate circumstances, such as affirmative action, social programs, or even individualized assistance (Farwell and Weiner, 1998; Henry and Weiner, 1999; Weiner, 1993). As we saw in the section on controllable attributions, this assistance would not be available to those individuals and groups thought to be responsible for undesirable plights.

External Attributions and Self-Evaluation: Preserving Self-Esteem

Making external attributions may be one mechanism that buffers the self-esteem of stereotyped or otherwise stigmatized group members from the adverse effects of prejudice. If members of stereotyped groups can attribute negative outcomes to external, uncontrollable causes like discrimination, and away from internal, uncontrollable causes like low ability or poor social skills (which are implied by stereotypes of many groups), they absolve themselves of responsibility and sidestep self-esteem threatening accusations about their ability (Crocker and Major, 1989). Crocker, Major, and their colleagues have found that when members of stigmatized groups,

such as African Americans (Crocker, *et al.,* 1989) and women (Testa *et al.,* 1988), can attribute receiving poor evaluations on a task to the evaluator's racism or sexism (an external cause), they report much higher self-esteem than do those who cannot make reasonable claims of prejudice.

Making uncontrollable, *external* attributions (e.g., discrimination, biased tasks) is often used by members of ethnic minority groups as a tool to maintain self-esteem and to counteract the threatening effects of the internal, stable, and uncontrollable attributions implied by the stereotypes of their groups (for review, see Crocker and Major, 1989). Girls, however, are less likely to employ these self-protective strategies (e.g., Rhodewalt and Hill, 1995), and as a result, are more susceptible to the harmful effects of internal, stable, and uncontrollable attributions (like low ability) associated with their group.

Also, if external causes are not there to blame, self-threatening attributional implications (e.g., believing the negative outcome was due to something about them) can aversely impact self-esteem (Crocker *et al.,* 1989; Testa *et al.,* 1988). Both women (Testa *et al.,* 1988) and blacks (Crocker *et al.,* 1989) who attributed poor evaluations they received to a judge's prejudice maintained high self-regard; however, self-esteem suffered for those stereotyped individuals who could not attribute negative evaluations externally.

Thus, attributing negative outcomes to prejudice (and not to the self) can lessen the blow to the self-esteem of the stereotyped. However, stereotypes often get communicated in subtle, ambiguous ways that are more difficult to combat with accusations of discrimination. It is in these instances where stereotypes can take their toll on the self-worth of the stereotyped. Furthermore, even if the buffering effects of external attributions are successful, beliefs that discrimination is uncontrollable and will persist across time may still create the notion that there is no use trying to succeed because the insurmountable obstacles of discrimination will always be there. Thus, external attributions for poor performance may protect self-esteem but may ultimately cause the stigmatized to lose motivation in, or to withdraw from, the task and even to drop out from school altogether (for a discussion of this phenomenon, see the article by Van Laar in this journal.

The buffering effects of external attributions can also backfire when it comes to making attributions for positive outcomes. If positive evaluations can be attributed to stigmatized group membership, this can decrease one's ability to take credit for good performance on a task because the source of the evaluation is ambiguous (Crocker and Major, 1989). Perhaps the positive evaluations are an effort by the evaluator to avoid seeming prejudiced (an external attribution) and are not based on actual good performance (an internal attribution). Crocker and her colleagues (Crocker *et al.,* 1989) found that when African American students received positive

feedback from White evaluators who were blind to their race, African Americans' self-esteem increased; but their self-esteem decreased when the positive evaluations came from White evaluators who knew they were black. Thus, members of stereotyped groups only benefit from positive outcomes if they believe that they can take credit for their desirable deeds, and that their rewards are deserved.

SECONDARY ATTRIBUTIONAL PROCESSES: HOW TEACHERS' EXPECTATIONS INFLUENCE THE CAUSAL BELIEFS OF STUDENTS

So far I have discussed the primary attributional content of stereotypes and how it effects social judgments and self-perceptions. However, the impact that stereotypes have on attributions is even more far reaching. When influential adults (such as teachers and administrators) make attributions for a child's behavior (e.g., based on stereotypes), their reactions can directly or indirectly communicate that attribution to the child. These reactions, in turn, can affect the child's own beliefs about the cause of his or her behavior, which can have consequences for the child's subsequent motivation and scholastic performance (Dweck and Bush, 1976; Dweck *et al.,* 1978).

Dweck and her associates (1978) have found that, although teachers give more negative feedback to boys, this negative feedback is directed at both intellectual performance and inappropriate behavior, and is more likely to contain effort attributions (an unstable and surmountable cause). However, negative evaluations given to girls are almost exclusively directed at intellectual performance and contain fewer references to effort. This differential pattern of feedback has been linked to children's own attributions for performance, with girls being more likely to attribute failure to lack of ability and boys more likely to attribute failure to lack of effort. As mentioned previously, attributing failure to lack of ability results in decreased motivation and hopelessness on the task (e.g., Abramson *et al.,* 1978). Thus, the attributions that teachers communicate to students can impact (at times, deleteriously) the child's own attributional interpretations of their outcomes.

Although teachers' attributions for performance are often directly communicated to the student, attributional beliefs can also be subtly conveyed in how the teacher treats the student or responds emotionally to the student's outcomes (Weiner, 1993, 1995). For example, teachers spend more class time interacting with students they perceive to be high in ability than with those perceived as lower in ability (Brophy, 1983; Brophy and Good,

1974). In a study conducted on the intervention and punishment strategies of high school teachers, Reyna and Weiner (1999) found that teachers respond differently to students' failures based on the attributions teachers make for the failure. Failures perceived as controllable are met with anger and punitive responses, whereas failures due to uncontrollable causes (like low ability) are met with sympathy and helpful responses from the teacher.

The issue is whether students can deduce the attributional meaning behind these reactions. Butler (1994) has shown that once students reach the elementary grade levels, they are able to decipher a teacher's reactions along attributional lines. Causal beliefs about a student's poor performance, which get communicated through the teacher's reactions, can impact the student's motivation (see Bar-Tal, 1982, for review). For example, although continual pity may be an act of kindness on the teacher's part, the long-term motivational impact for the student may be harmful if the student perceives the pity as a signal that the teacher believes the student is incapable of success (see Clark, 1997; Graham, 1984).

In summary, the attributions that a teacher makes for a student's behavior or performance get communicated to the student either directly or through emotional and behavioral cues. These in turn, impact the students own beliefs about the causes of their outcomes, which can influence the children's motivations and future achievement strategies. At times this influence can be positive, such as when teachers communicate to a hopeless child that his or her failure was due to poor study strategies and not to low aptitude (see previous discussion of attribution retraining). At other times this attributional feedback can be detrimental, such as when a math teacher communicates to a girl—by not calling on her for difficult questions—that she is not capable at math.

INTERVENTIONS THAT CAN BUFFER THE EFFECTS OF STEREOTYPES

Through understanding the attributions communicated through stereotypes and their consequences, this model sheds some light on possible interventions that can counteract the defeating effects of stereotypes. For example, stereotypes imply characteristics, behaviors, or traits that are deemed pervasive and stable within a group. Retraining students to reinterpret their disappointing scholastic experiences in less stable terms has had promising effects on the motivation and future performance of students (Forsterling, 1985). Students who are taught to perceive failure as unstable and surmountable will be more likely to persist at school and will show improvements over time compared to students who hold on to pessimistic

beliefs about their performance that are reinforced through stereotypes. In addition, the pessimistic attribution styles of teachers, or at least pessimistic attributions directed at certain groups, can also have demoralizing effects on students. To avoid propagating stereotypical beliefs in the classroom, it is also important for educators to communicate to students that failure is unstable and can be overcome.

Furthermore, teachers and other influential adults or peers can be mindful of stereotype-eliciting events–such as girls in math and science classes; African American, Latino, or economically disadvantaged students in any academic domain; shy children on the playground and especially in physical education class, and so on. When these situations occur, an influential adult can take steps to ensure that stereotypes are not reinforced by the environment. For example, employing systems that ensure equal participation by all students may prevent stereotyping or stigmatization from occurring (e.g., alternating between calling on boys and girls in math and science classes, randomly assigning children to sports teams as opposed to letting children get picked by their peers).

CONCLUSIONS

Stereotypes pervade educational and achievement domains, from the classroom to the playground, from the dean's office to the advisors office, from the time a child enters preschool until they retire. Stereotypes can impede people's goals through catalyzing and justifying negative evaluations and punitive or rejecting behaviors toward the stereotyped. Stereotypes also create internal barriers to success by propagating self-doubt, dashed hopes for the future, or lost confidence in an environment that does not let the stereotyped succeed. And although they are too numerous to count, the multitude of possible stereotypes have very specific consequences for the way students are judged and treated by their teachers and peers, and for the way students perceive their own capabilities and potentials.

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