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## **Evaluative Feedback Expresses and Reinforces Cultural Stereotypes**

Andrea C. Vial

Andrei Cimpian

New York University

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Please address correspondence to:

Andrea C. Vial  
Department of Psychology  
New York University  
6 Washington Place  
New York, NY 10003  
Email: andrea.vial@nyu.edu

### Abstract

Evaluative feedback (praise and criticism) has a powerful influence on behavior, in part because it communicates what society values in and expects of an individual. Importantly, feedback often reflects values and expectations that are informed by the social group of the individual receiving feedback, and the stereotypes attached to it, rather than being based just on information specific to the individual. In this chapter, we first detail how group stereotypes affect the evaluative feedback given to stereotyped individuals. We then review the effects of stereotyped feedback, highlighting the role that such feedback plays in maintaining group disparities.

### **Evaluative Feedback Expresses and Reinforces Cultural Stereotypes**

When used appropriately, evaluative feedback (that is, praise and criticism) is a powerful motivator (Yeager et al., 2014). Often, however, feedback fails to shape behavior as intended (Brophy, 1981) or even causes harm (Brummelman et al., 2014). Here, we describe the harm that emerges when feedback intersects with stereotypes: By giving voice to what society expects of the members of various groups, feedback ultimately reinforces group stereotypes and contributes to the maintenance of group disparities. We first describe how stereotypes influence the feedback provided to stereotyped individuals. Our review focuses on stereotypes about gender and race because most of the research does as well. We then describe how stereotyped feedback shapes stereotyped individuals' self-perceptions and ability to succeed in counter-stereotypical fields.

#### **The Effects of Stereotypes on Evaluative Feedback**

To clarify, we use the terms *feedback*, *praise*, and *criticism* to refer to an overt evaluation of a behavior; in our terminology, an *evaluation* is a private judgment or attitude (e.g., X approves of Y's behavior) that is made public by the act of providing feedback (e.g., X says to Y, "That was great!"). At a first pass, we might use two dimensions to predict the type of feedback that an individual will receive for a behavior. The first dimension is the *valence* of the attribute that is illustrated by the behavior (the *x* axis in Figure 1A). For instance, donating to charity illustrates a positively-valenced attribute (namely, generosity), whereas punching someone illustrates a negatively-valenced attribute (namely, aggression). The second dimension is the *level* or degree to which the behavior illustrates the relevant attribute (the *y* axis). For instance, donating \$100 illustrates higher levels of generosity than donating \$1. The midpoint on this dimension represents the average perceived level of an attribute in the population.

**A. FEEDBACK IN THE ABSENCE OF STEREOTYPES**

**B. FEEDBACK IN THE PRESENCE OF STEREOTYPES  
(IN THIS EXAMPLE, A NEGATIVE GROUP STEREOTYPE ABOUT A POSITIVE ATTRIBUTE)**

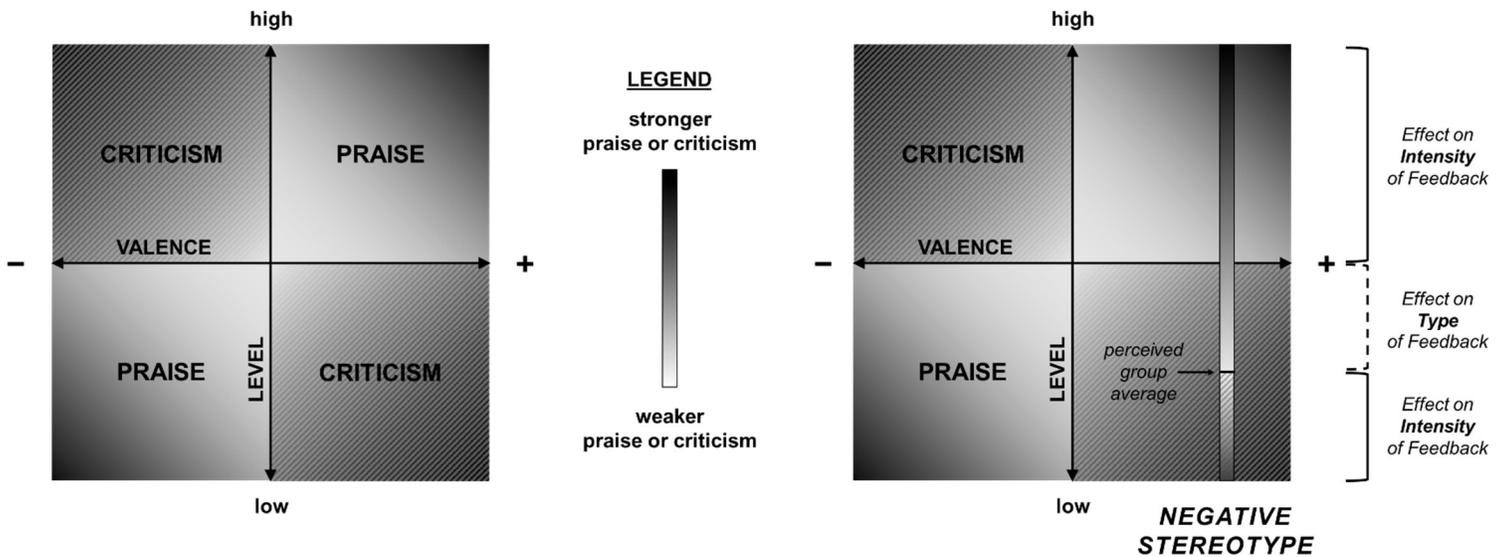


Figure 1. Evaluative feedback for a behavior as a function of the valence of the attribute illustrated by the behavior (*x* axis) and the level or degree to which the behavior demonstrates that attribute (*y* axis). Praise is depicted by the solid areas, criticism by the hatched areas. Feedback intensity is depicted via shading (darker shades = more intense feedback). Panel A illustrates feedback in the absence of stereotypes. Panel B provides a specific example of the effects of a negative stereotype on feedback (see “negative stereotype” column); the brackets and labels on the right side of Figure 1B map onto this specific example.

On this simple analysis, behaviors that demonstrate high levels of a positively-valenced attribute (e.g., generosity) will result in praise, whereas behaviors that demonstrate low levels of the same attribute will result in criticism. This relation is reversed for negatively-valenced attributes (e.g., aggression). The *intensity* of the feedback for a behavior (e.g., whether a person receives lukewarm vs. effusive praise) depends both on the level and the valence of the attribute displayed: The more extreme a behavior is on either dimension, the more intense the feedback (as illustrated by darker shading in Figure 1A). For instance, a person will receive more effusive praise for displaying a level of math skill *far* above the perceived average than *just* above

average.

### **Effects of Stereotypes on Whether a Behavior Is Evaluated Positively vs. Negatively**

A stereotype is a generic belief about a social group (Bian & Cimpian, 2017; Hammond & Cimpian, 2017). Most stereotypes assign a certain level (high or low) of an attribute (positive or negative) to a certain group. For example, common stereotypes are that women are bad at math (i.e., this group has low average levels of a positive attribute) or that Black people are athletic (i.e., this group has high average levels of a positive attribute). By informing people's perceptions of the average level of an attribute for a group (see the "perceived group average" line in Figure 1B), stereotypes set the standard relative to which evaluative feedback is provided for individuals in that group (Biernat & Kobrynowicz, 1997). In turn, reliance on these stereotype-based standards affects both the *intensity* and the *type* of feedback provided to stereotyped individuals.

**#1. Stereotype Effects on the Intensity of Feedback.** Stereotypes affect the intensity of the feedback provided to members of stereotyped groups. To illustrate, as a member of a group that is negatively stereotyped in the domain of math, a woman who displays strong mathematical skill—above both the perceived population average and the stereotype of her group—is likely to receive more effusive praise than other individuals at the same skill level (see Figure 1B). This is because her skill is more extreme relative to the (low) standard by which she is judged than would be the case for a man. Similarly, this low stereotyped standard means that she might also receive milder criticism for poor performance in math.

Several studies provide evidence for the effect of stereotypes on feedback intensity. For example, negative stereotypes that men are unlikely to be altruistic lead individual men to receive more effusive praise than women for behaving altruistically in the workplace (Heilman

& Chen, 2005; Kobrynowicz & Biernat, 1997). Other studies have found similar intensification effects in contexts where women are negatively stereotyped, such as sports (Biernat & Vescio, 2002). Stereotypes about racial groups intensify evaluative feedback as well (Biernat & Kobrynowicz, 1997; Biernat & Manis, 1994). For example, lower stereotype-based standards lead participants to judge the standardized test performance of a Black student to be “better” than the same performance by a White student (Biernat, Collins, Katzarska-Miller, & Thompson, 2009). (To clarify, the fact that members of negatively stereotyped groups sometimes receive inflated praise does not mean that observers’ evaluation of the underlying attribute is inflated as well. Despite the effusive praise, negatively stereotyped individuals are often assumed to display lower levels of the underlying attribute than non-stereotyped individuals [Biernat & Vescio, 2002].) Comparable findings emerge for positive group stereotypes: People who endorse positive stereotypes of athleticism for Black people tend to evaluate Black individuals’ athleticism less positively, especially when the standard of comparison is the stereotypic average for this group (Biernat & Manis, 1994; see Heilman & Chen, 2005, for a gender-relevant example).

**#2. Stereotype Effects on the Type of Feedback.** Stereotypes can affect the type of feedback (praise vs. criticism) received by an individual (see Figure 1B). For instance, as a member of a group that is negatively stereotyped in the domain of math, a woman who performs better than would be expected given the stereotypes of her gender may receive praise even if her performance is *below* the perceived population average (which includes men). Thus, a behavior that might have been criticized in others is now met with praise. Similarly, members of negatively stereotyped groups are sometimes spared criticism for poor performance compared to other groups—and may even receive praise: White students showed a positivity bias when giving feedback on a poor-quality essay ostensibly written by a Black (vs. White) student (Harber,

1998), as did White teachers when giving feedback on Black and Latinx (vs. White) students' essays (Harber et al., 2012).

### **Effects of Stereotypes on Evaluative Feedback: Beyond Positivity vs. Negativity**

The two effects described above address only how stereotypes influence the degree to which a behavior is evaluated positively or negatively. But stereotypes also affect (#3) causal attributions for behavior and, in some cases, (#4) global evaluations of the feedback recipient, as well as (#5) the frequency of feedback in a stereotyped domain. We describe each of these effects below.

**#3. Stereotype Effects on Causal Attributions.** Feedback can convey information about how observers *explained* the behavior under evaluation (Cimpian, Arce, Markman, & Dweck, 2007; Mueller & Dweck, 1998), and stereotypes have systematic effects on this aspect of feedback: Whether a group is stereotyped positively or negatively, feedback for an individual's stereotype-*consistent* behavior (e.g., a Black person's excellent athletic performance) is more likely to reference the individual's inherent traits or properties as an explanation, in part because stereotypes are generally understood as describing the inherent attributes of group members (Cimpian & Salomon, 2014; Hammond & Cimpian, 2017). In contrast, feedback for an individual's stereotype-*inconsistent* behavior (e.g., a woman's excellent math performance) is more likely to explain that behavior in ways that reconcile it with the stereotype and portray the individual or the circumstances as unusual (e.g., "she worked really hard," "she got lucky"; see Richards & Hewstone, 2001). Indeed, teachers praise boys for the intellectual quality of their work more often than they praise girls (Dweck, Davidson, Nelson, & Enna, 1978), which is as expected given that high-level intellectual ability is a male-stereotypic trait (Bian, Leslie, & Cimpian, 2018; Gálvez, Tiffenberg, & Altszyler, 2019; Leslie, Cimpian, Meyer, & Freeland,

2015). Conversely, teachers systematically attribute girls' good performance to hard work (J. Cimpian, Lubienski, Timmer, Makowski, & Miller, 2016).

**#4. Stereotype Effects on Global Impressions of the Person.** Many stereotypes are *descriptive* beliefs about the members of a group. When people believe that women are bad at math or that Black people are athletic, they are endorsing descriptive stereotypes. They do not typically think that women *should* be bad at math or that Black people *should* be athletic. However, some stereotypes—particularly about gender—have a normative element as well, dictating what people in a group *should be* like; these are known as *prescriptive* stereotypes (Burgess & Borgida, 1999). When people believe that it is desirable for women in particular to be modest or for men in particular to be ambitious, they are endorsing prescriptive stereotypes (Smith & Huntoon, 2014). Beyond influencing feedback intensity/type for specific behaviors (as described above), prescriptive stereotypes also affect an observer's *global* evaluation of the *person*. For example, several studies have shown negative global evaluations of successful female targets, who are often perceived to violate gender prescriptions when they project ambition and confidence (Heilman & Okimoto, 2007; Phelan, Moss-Racusin, & Rudman, 2008). When a woman brags about her accomplishments or fails to act in altruistic ways, criticism of her behavior is often tinged with dislike for her as a person (Heilman, 2001). Similarly, male targets who violate gender prescriptions by being modest about their accomplishments often elicit negative global feedback (Moss-Racusin, Phelan, & Rudman, 2010).

**#5. Stereotype Effects on Frequency of Feedback.** The value-laden layer of prescriptive stereotypes has another important effect: *It makes feedback more likely to be provided in the first place*. Individuals are more likely to be praised or criticized for behaviors that conform or fail to conform, respectively, to a prescriptive stereotype than a merely

descriptive stereotypic standard. This is likely because observers care more about prescriptive stereotypic standards, and may also assume that individuals being evaluated care more about these standards as well and would thus benefit from the feedback. Illustrating this phenomenon, women are more likely to be praised or complimented for their appearance than men (Eckert & McConnell-Ginet, 2003), whereas men are more frequently praised for their skills and abilities (Holmes, 1988; Parisi & Wogan, 2006; Rees-Miller, 2011).

### **The Effects of Stereotyped Evaluative Feedback**

Evaluative feedback that is influenced by stereotypes contributes to the maintenance of the societal status quo, (re)producing inequality in several ways, as we describe next. Due in part to their effects on praise and criticism, stereotypes are ultimately self-reinforcing—they bring about, and maintain, the version of reality they project.

#### **Stereotyped Feedback Shapes Self-Concepts**

Stereotyped feedback reinforces the status quo by shaping stereotyped individuals' self-concepts (i.e., what they value, what they think they are good at) from a young age (Block, Gonzalez, Schmader, & Baron, 2018). A child who is often praised (or criticized) for displaying (or failing to display) an attribute stereotypically associated with their group might over time begin to value that attribute themselves—to incorporate it as part of their self-concept. This effect follows from general principles of operant conditioning (Domjan, 2000): There are few reinforcers as powerful as the perception that others approve of us, and few punishers as effective as the prospect of social disapproval (Tomasello, 2014; though see Brummelman, 2018). Differentially reinforcing (with praise) and punishing (with criticism) the behavior of certain groups (e.g., girls) with respect to certain attributes (e.g., being altruistic) is likely to modulate the behaviors and attitudes associated with those attributes. Ultimately, these

developmental processes can be observed in the way that adults sort themselves into stereotype-congruent careers (e.g., women choose more communally-oriented careers; Diekman, Brown, Johnston, & Clark, 2010). The fact that self-selection among adults occurs seemingly free from external influence—people choose the careers they *want*—is in part a function of prior shaping of an individual's desires by stereotype-driven evaluations from parents, teachers, and peers (Sullivan, Moss-Racusin, Lopez, & Williams, 2018; Thomas & Blakemore, 2013).

Stereotyped praise and criticism shape not just what individuals want but also *what they believe they can achieve*, another key facet of the self-concept. For example, praising the success of negatively stereotyped groups (e.g., girls doing well in math) in terms of their effort, while potentially beneficial in some respects (Mueller & Dweck, 1998), might also lead members of these groups—as well as observers—to infer that their effort compensates for a lack of ability (Amemiya & Wang, 2018; Meyer, 1992). In turn, this inference is likely to trigger concerns about belonging and undermine persistence in members of stigmatized groups (Graham & Taylor, 2014; Smith, Lewis, Hawthorne, & Hodges, 2013).

### **Stereotyped Feedback Creates Obstacles**

Stereotyped feedback reinforces the status quo not just by changing how members of stigmatized groups think about themselves but also by creating external barriers that keep individuals out of domains that are not stereotypically associated with their group (Gaddis, 2015; Heilman, 2001). Some of these effects are direct and obvious: Evaluating individuals through the lens of their group membership carries the risk of failing to appropriately recognize and reward their good performance. For example, women who excel in a male-typed career are often viewed as highly competent but “cold,” which is a violation of gender prescriptions. As a result, women who are successful in male-typed domains often receive fewer organizational rewards than

comparable men (Heilman et al., 2004). More generally, there is evidence that the stereotyped expectations and evaluations of those in positions of authority deprive individuals from stigmatized groups of opportunities to show their abilities and further their careers (Bian, Leslie, & Cimpian, 2018; Biernat & Vescio, 2002; Moss-Racusin, Dovidio, Brescoll, Graham, & Handelsman, 2012).

Beyond the direct effects that stereotyped feedback can have on the opportunities afforded to stigmatized groups, stereotyped feedback can—more indirectly and subtly—undermine their motivation and success. An individual who perceives that others are evaluating them in light of a certain stereotype is likely to experience a sense of psychological threat even if they *reject* that stereotype (Schmader, Johns, & Forbes, 2008; Steele, 2013). As a result of this threat, the individual may experience uncertainty about whether they belong in that context, decreased trust, and other psychological states that are not conducive to success (Bian, Leslie, Murphy, & Cimpian, 2018; Emerson & Murphy, 2015; Walton & Cohen, 2007). Thus, stereotyped feedback can set into motion a set of processes within the recipient that ultimately limit their success in a counter-stereotypical domain, thereby reinforcing the status quo.

### **Conclusion**

Whether we are aware of it or not, the feedback we give to others is not just a function of their behavior (i.e., the objective stimulus). Critically, others' perceived social identities influence the standard we use to evaluate their behavior and, as a result, the feedback we give them. The evidence reviewed here suggests stereotypes affect multiple aspects of feedback, from its positivity and frequency to the factors that we think explain the person's behavior, and these effects are themselves consequential. Much like a self-fulfilling prophecy, the recipients of stereotyped feedback often end up conforming to society's perceptions of their groups, thereby

“validating” these biased perceptions and perpetuating social inequality.

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