



The dynamics of warmth and competence judgments, and their outcomes in organizations

Amy J.C. Cuddy^{a,*}, Peter Glick^b, Anna Beninger^a

^aHarvard Business School, United States

^bLawrence University, United States

Available online 8 November 2011

Abstract

Two traits – warmth and competence – govern social judgments of individuals and groups, and these judgments shape people’s emotions and behaviors. The present chapter describes the causes and consequences of warmth and competence judgments; how, when and why they determine significant professional and organizational outcomes, such as hiring, employee evaluation, and allocation of tasks and resources. Warmth and competence represent the central dimensions of group stereotypes, the majority of which are ambivalent – characterizing groups as warm but incompetent (e.g., older people, working mothers) or competent but cold (e.g., “model minorities,” female leaders), in turn eliciting ambivalent feelings (i.e., pity and envy, respectively) and actions toward members of those groups. However, through nonverbal behaviors that subtly communicate warmth and competence information, people can manage the impressions they make on colleagues, potential employers, and possible investors. Finally, we discuss important directions for future research, such as investigating the causes and consequences of how organizations and industries are evaluated on warmth and competence.

© 2011 Elsevier Ltd. All rights reserved.

Contents

1. Warmth and competence: fundamental dimensions for judging others	75
1.1. Warmth and competence in judgments of individuals	75
1.1.1. The primacy of warmth judgments	76
1.1.2. One or the other, but not both?	77
1.1.3. Valence and perceived diagnosticity of warmth vs. competence judgments	78
2. Social categories as cues to warmth and competence	80
2.1. Outcomes of warmth and competence stereotypes	81
2.1.1. Consequences for emotions	81
2.1.2. Consequences for behavior	83
2.2. Specific ambivalent cases	84
2.2.1. Warm but incompetent	84
2.2.2. Competent but cold	85
3. Consequences of warmth and competence judgments in organizations	86
3.1. Personnel selection, role assignments, and task assignments	86
3.2. Evaluation, assessment, and promotion	86

* Corresponding author.

E-mail address: acuddy@hbs.edu (A.J.C. Cuddy).

3.3.	Effective team functioning and managing diversity	86
3.4.	How to avoid making (or acting on) biased warmth and competence judgments	87
3.4.1.	Leaders' influence	87
3.4.2.	Peer influence	87
3.4.3.	Objective versus subjective criteria for personnel evaluations.	87
3.4.4.	Enforcing (versus failing to enforce) non-discriminatory policies	88
3.5.	Summary.	88
4.	Warmth, competence, and self presentation	88
4.1.	Nonverbal behaviors convey warmth and competence	89
4.1.1.	Warmth	89
4.1.2.	Competence.	90
4.1.3.	Summary.	90
5.	Directions for future work.	91
5.1.	Which is more important?	91
5.2.	Occupations, organizational divisions, organizations, and industries	92
6.	Concluding thoughts	92
	Acknowledgements	93
	References	93

In a highly competitive, fast-paced, globalized environment, organizational leaders often need to judge others quickly. Across many types of decisions – whom to hire, which individuals will form the most innovative and effective teams, the best negotiation strategy to pursue with someone on the other side of the table, whether to invest capital in a young entrepreneur, or whether to begin a new venture with a potential partner – accurate judgments about others represent a key component for making good decisions. Thus, leaders need to become skilled at how to quickly read others to discern their character. Simultaneously, leaders are continually being judged by others – their employees, associates, partners, clients, suppliers, and competitors. And those judgments, in turn, affect how others behave, such as whether an employee becomes motivated to exert extra effort or whether a competitor, perceiving weakness, makes an aggressive move. Thus, leaders must also understand and know how to influence the way others perceive them. This chapter addresses the human element on both sides of the equation – judging others and being judged by them – focusing on the fundamental dimensions by which we perceive others and they perceive us, the cues that influence these judgments, the ways we can make more accurate judgments of others, and how we can control impressions others form about us.

When it comes to judging others, as much as we would like to believe that we assess each new individual on his or her own idiosyncratic merits and flaws, we often do not have the time or luxury to exert the required cognitive resources. As a result, we make broad judgments that are less nuanced and less accurate. However, we do not simply evaluate others along a single “bad to good” dimension, accepting some and rejecting others. Instead, psychological research involving thousands of people from widely varied cultures has established that we use two trait dimensions, labeled here as *warmth* and *competence*, to “sort” our social worlds, judging people as relatively high or low on each dimension (Cuddy, Fiske, & Glick, 2008; Fiske, Cuddy, & Glick, 2007). Moreover, a number of studies show that warmth and competence assessments each determine different aspects of how we interact with others. For example, warmth judgments affect how much we trust versus doubt others’ motives, whereas competence judgments affect assessments of others’ ability to effectively enact their motives.

An important source of error in warmth and competence judgments stems from pervasive stereotypes based on others’ race, gender, nationality, religion, profession, socioeconomic status, and similar social categories that influence whether we view another person (or another views us) as warm or cold, competent or incompetent. We may, therefore, make decisions about whom to trust, doubt, defend, attack, hire, or fire based on imperfect data. Such misjudgments can have unfortunate consequences. Assuming warmth, or lack thereof, can lead decision-makers to miss warning signs that an apparently warm associate is untrustworthy or, conversely, to forgo a lucrative opportunity to form a partnership because a false gut reaction sparks mistrust. Assumptions about competence similarly can undermine effective decision-making, leading to a hiring decision that is soon regretted, for example.

The first part of this chapter addresses why warmth and competence represent fundamental dimensions along which people are judged, how much weight each dimension receives in the context in which judgments take place, and how

judgments on one dimension interact with judgments on the other. The second part focuses on how group stereotypes can bias warmth and competence judgments. This section emphasizes the prevalence of ‘ambivalent’ stereotypes – those that characterize groups as high on one dimension, but low on the other (i.e., as warm but incompetent, or as competent but cold) – and illustrates how ambivalent stereotyping leads to ambivalent feelings (i.e., envy and pity, respectively) and actions toward individuals. The third section focuses on the consequences of warmth and competence judgments in organizations, such as effects on hiring decisions, performance evaluations, role and task assignments, assessments of teams’ performance, and the way diversity is managed. In the fourth section, we first address self presentation: how do people communicate warmth and competence, managing the impressions they make on colleagues, potential employers, and possible investors? People can affect how others judge them on the two trait dimensions through their behavior and performance – especially when they interact with others over time, allowing multiple opportunities to influence perceptions and to overcome misperceptions based on categorical judgments. But, given that impressions often take hold in the first moments of an interaction, people can also manage the impressions they make through their body language; this section integrates findings from the areas of nonverbal behavior, embodiment, even psychophysiology, focusing on how warmth and competence are communicated through subtle cues. In the discussion we suggest directions for future research.

1. Warmth and competence: fundamental dimensions for judging others

1.1. Warmth and competence in judgments of individuals

Warmth (e.g., friendliness, trustworthiness, empathy, and kindness) and competence (e.g., intelligence, power, efficacy, and skill) represent fundamental dimensions on which both individuals and groups are perceived. These dimensions have a rich history in research on person and group perception, dating back to Asch’s (1946) classic study in which manipulating information about an individual’s warmth, while keeping competence information constant, led to a radical change in the *gestalt* of how the individual was perceived. Similarly, early work on group and organizational leadership identified these dimensions as central. In his foundational work on small group interactions, Bales (1950) distinguished between socio-emotional (warmth-oriented) and task (competence-oriented) leadership. Similarly, the classic Ohio State leadership studies (Stogdill, 1948, 1974) highlighted leaders’ tendency to show “consideration” (warm traits, such as approachability and concern for group members’ welfare) versus “initiating structure” (a competence-centered orientation, such as defining performance standards for group members). Such distinctions have remained an important conceptual tool in understanding leadership, with various leadership styles representing particular combinations of warmth versus coldness and competence versus incompetence. Authoritarian or autocratic leadership emphasizes the leader’s competence at the expense of warmth, whereas democratic or participative styles emphasize a leader’s warmth, perhaps at the expense of competence (Chemers, 1997). Transformational leadership represents combining competence with warmth. The warmth–competence dimensions also show up in voters’ evaluations of political candidates (Abelson, Kinder, Peters, & Fiske, 1982; Kinder & Sears, 1985; Todorov, Mandisodza, Goren, & Hall, 2005; Wojciszke & Klusek, 1996), as dimensions of interpersonal attraction (Jamieson, Lydon, & Zanna, 1987; Lydon, Jamieson, & Zanna, 1988), and as predictors of how social networks develop (Casciaro & Sousa-Lobo, 2005), among other evaluations and behaviors.

Nevertheless, despite converging evidence across a variety of domains, until recently researchers failed to recognize the consistency with which these dimensions emerge in perceiving others because of the varying labels used to characterize them. For instance, Hovland, Janis, and Kelley (1953), in their pioneering Yale approach to attitudes and persuasion emphasized the dual roles of a source’s perceived credibility due to expertise (i.e., competence) versus trustworthiness (i.e., warmth). Rosenberg, Nelson, and Vivekananthan (1968) showed that individuals tend to be perceived along what they called *intellectual good-bad* (i.e., competence versus incompetence) and *social good-bad* (i.e., warm versus cold) dimensions. Gender stereotype researchers have variously referred to the warmth dimension as *communality*, *expressiveness*, and *feminine traits*, and the competence dimension as *agency*, *instrumentality*, and *masculine traits* (see Rudman & Glick, 2008).

Wojciszke (1994), who uses *morality* to label the dimension referred to here as *warmth*, has convincingly demonstrated that the two dimensions (warmth/morality and competence) are not only ubiquitous frameworks by which people organize their judgments of others, but account for the vast majority of the variance in how individuals are perceived (Wojciszke, Dowhyluk, & Jaworski, 1998). When Wojciszke (1994) asked participants to

recount real-life encounters with others and interpret these events, participants framed over 75 percent of the more than 1000 events in terms of either morality (warmth) or competence (Wojciszke, 1994). In another study that asked employed participants about their impressions of work supervisors, Wojciszke, Abele, & Baryla (2007) again found that the two dimensions dominated participants' characterizations. Thus, people's spontaneous construals of others' behaviors and characterizations of others center on warmth and competence (for a review, see Wojciszke, 2005a,b).

Why might warmth and competence be so ubiquitous and important in determining perceptions of others? These traits answer two socio-functional questions about others. First, warmth (or its absence) indicates whether others are likely to have positive or negative intentions toward us; second, competence answers the question of whether the other is capable of carrying out those intentions. The former question is primary because it distinguishes friend from foe. In humans' evolutionary history, this question had to be answered quickly to prepare for fight or flight upon encountering a foe, while the exact capabilities of the other represents a secondary question that might determine whether fight or flight would be a better choice. Warmth indicates friendliness and coldness indicates hostility; or as Peeters (2001) has described it, the warm traits are "other-profitable," suggesting a general orientation toward helping others.

In automatic evaluations of faces, termed spontaneous trait inferences (STIs), two dimensions play a crucial role – trustworthiness (akin to warmth) and dominance (akin to competence). Trustworthiness/warmth inferences are based on facial features that signal approach/avoidance; dominance/competence inferences are based on features that signal strength/weakness. Consistent with the above argument that warmth and competence judgments are rooted in our need to assess others' intent and ability to harm, respectively, Todorov and colleagues theorize that the centrality of these two dimensions in STIs reflects an "overgeneralization of adaptive mechanisms for inferring harmful intentions and ability to cause harm" (Oosterhof & Todorov, 2008; Todorov, 2008; Todorov, Said, Engell, & Oosterhof, 2008). Certain facial cues, such as facial width (Stirrat & Perrett, 2010), may even validly signal trust and cooperation in men. Across cultures (Japan and U.S.), perceivers show high consensus in judgments about warmth and competence based on viewing faces. These judgments are also predictive of electoral success in within- and cross-cultural ratings of politicians; however in this context, competence inferences are more consistent than warmth ratings (Rule et al., 2010).

In sum, decades of research across a variety of subfields (e.g., personality psychology, social psychology, organizational psychology) suggest that warmth and competence represent fundamental dimensions of person perception, although researchers have used a bewildering variety of labels to characterize these dimensions. Not only are these dimensions ubiquitous, they explain the vast majority of variance in judgments of others. Moreover, these dimensions appear to be relevant across cultures, arguably because they are rooted in evolutionary adaptations – the need to answer two questions about others: How does the other intend to act toward me? Can the other carry out those intentions?

1.1.1. The primacy of warmth judgments

Warmth judgments are made more quickly than competence judgments and have a greater impact on overall attitudes toward others (e.g., Wojciszke & Abele, 2008; Wojciszke, Bazinska, & Jaworski, 1998). For example, perceivers identify warmth-related trait words faster than they identify competence-related trait words in lexical decision tasks (Ybarra, Chan, & Park, 2001), and infer warmth significantly faster than competence when judging faces for only one-tenth of one second (Willis & Todorov, 2006). In a study that examined 200 trait terms from a dozen different dimensions (e.g., controllability, temporal stability, situational stability and behavioral range), only warmth and competence predicted global evaluations of targets – accounting for 97 percent of the variance – but warmth traits contributed significantly more to those evaluations than did competence traits (Wojciszke, Dowhyluk, et al., 1998). In addition, children as young as three use warmth/benevolence judgments before competence judgments to make decisions about new people they encounter (Mascaro & Sperber, 2009).

These warmth primacy effects can be explained by the urgency with which people need to assess an unfamiliar others' warmth. As noted above, warmth assessments (friend or foe?) have primacy, whereas the exact capabilities of the other represent a secondary consideration, consistent with Peeters' (2001) conceptualization of warmth as other-profitable and competence as self-profitable. Warmth and competence are inferred from actions that appear to serve self-interest versus others' interests, respectively (Cislak & Wojciszke, 2008), and predict the direction of target resource use – will it be used to benefit the perceiver (warmth) or the target (competence; Scholer & Higgins, 2008). Recent evidence suggests that lay conceptualizations of warmth are more stable and consistent across cultures, which

may also help to explain why warmth is primary. For example, in studies comparing ratings by U.S. and Hong Kong participants, construals of warmth were more stable across cultures and contexts; competence inferences varied more (Ybarra et al., 2008). Additionally, in intergroup situations, people perceive warmth information as more stable and accurate than competence information (Kenworthy & Tausch, 2008).

Sometimes, however, competence takes primacy because the weights we assign to each dimension (and the resultant impact on actions we take) are, to some extent, context-sensitive. For example, although a substantial body of research shows that warmth is weighted more heavily when evaluating others, the reverse is usually true for evaluations of the self and *related* others; in these cases, people usually weight competence more heavily (Abele & Wojciszke, 2007; Wojciszke & Abele, 2008). Given the other- versus self-profitability distinction between warmth and competence, respectively, this makes sense: people would prefer for themselves and closely related others (whom they already trust) to possess more of the trait that benefits the self – competence – than the trait that benefits others – warmth.

Similarly, although warmth usually trumps competence in judgments of strangers in social situations, within organizational contexts, competence judgments may again take primacy. For example, how a job is described can determine whether decision-makers focus exclusively on a candidate's competence or also factor in warmth when deciding whom to hire, with potentially ironic consequences. Rudman and Glick (1999) had participants make hiring recommendations about an alleged finalist (seen in a videotaped interview) for a computer lab manager job. The job description varied across conditions, emphasizing only competence (e.g., technical abilities, ambition) or both competence and warmth (e.g., helping users, making the lab welcoming). The job description manipulation shifted whether competence judgments alone influenced hiring decisions (competence-only description) or both dimensions were taken into account (competence-and-warmth description).

The competence-only versus competence and warmth distinction captures a shift that has occurred in conceptions of good leadership, both among researchers and in organizations themselves. In response to rapid changes, for example the neck-breaking pace of innovation, organizations have become more team-oriented, requiring “transformational leadership” (e.g., Bass, 1990) rather than command-and-control leadership that dictates to subordinates. This new style of leadership requires social skills and warmth. Thus, how leaders and potential leaders are evaluated has shifted (Eagly & Carli, 2007). Competence may still be primary, but warmth has gained in importance.

It is not surprising that the contextual framing of “what I am supposed to judge” can narrow decision-makers' focus and, therefore, the weight they give to judgment dimensions. Nor should it surprise readers that work contexts elicit a more competence-focused frame for judging others. The study described above (Rudman & Glick, 1999), however, demonstrated that competence and warmth framing has an ironic effect on the evaluation of competent women, relative to identically depicted men: competent women were discriminated against only when warmth entered the scene as a job requirement. Stereotypes characterize women as generally warmer than men; therefore one might expect that adding warmth as a job qualification would favor female candidates. Instead, however, by demonstrating their competence, women elicit lower warmth evaluations in a way that men who demonstrate competence do not. When warmth becomes a legitimate evaluation criterion, the higher standard women are held to on this dimension can undermine their chances.

As detailed later in this chapter, simultaneous evaluation on both dimensions can pose problems for many groups, creating a double bind, because being perceived as high on one dimension can negatively affect evaluations on the other dimension. Above we noted how exhibiting competence can lead to lower perceptions of a woman's warmth; the opposite effect also occurs. And the dimension the individual seems “deficient” on can shift depending on which dimension the situational context emphasizes. For example, in work contexts where ‘competence’ represents the most salient dimension, working mothers are viewed as less competent than women who have no children (or men, whether fathers or not; Cuddy, Fiske, & Glick, 2004), although working mothers are perceived as warmer. In the home context, however, where warmth represents the salient dimension on which “being a good mother” is judged, people perceive working mothers as colder than mothers who do not work (Cuddy, Haines, & Frantz, 2011). This effect illustrates a critical feature of warmth and competence judgments for members of social categories that have historically experienced discrimination – a double bind in which being judged as high on one dimension leads to lower judgments on the other. In the next section we explain why, when, and for whom warmth and competence judgments have a hydraulic relationship.

1.1.2. *One or the other, but not both?*

Imagine receiving information suggesting that an individual has a warm personality. Are you likely to also assume that this person is competent? Classic findings have long led organizational and social psychologists to assume the

ubiquity of halo effects (i.e., that impressions of individuals and stereotypes of groups tend toward an overall positive or negative valence; e.g., Rosenberg et al., 1968). The halo effect suggests that positive information on one trait dimension leads perceivers to make more positive judgments on unrelated traits (e.g., that a warm individual is likely to be more competent than a cold individual). Recent research, however, shows that judgments on the fundamental warmth and competence dimensions are often negatively correlated – perceivers infer that an apparent surplus of one implies a deficit of the other (Judd, Hawkins, Yzerbyt, & Kashima, 2005). As a result, many people are seen as competent but cold (e.g., “She’s really smart . . . but clients will hate her”) or as warm but incompetent (e.g., “She’s so sweet . . . but she’d probably be an ineffective negotiator.”). In fact, experiments show that increases on one dimension lead to perceived decreases on the other – the more competent the target is, the less warm we believe she is, and vice versa (Kervyn, Yzerbyt, Judd, & Nunes, 2009).

Understanding when positive judgments on one dimension boost or harm judgments on the other represents important knowledge for leaders. For example, leaders would make more accurate decisions about others by knowing when perceiving another as warm might unduly influence perceptions of that individual’s competence. A halo effect could lead to investing in someone warm whose competence was more assumed than real. A contrast effect could lead to failing to hire someone warm because of assumed incompetence when, in fact, he or she would have been the best person for the job. Similarly, understanding when one effect or the other (halo or contrast) tends to occur can give leaders an edge in presenting themselves. For example, would leading off the meeting with a self-deprecating joke display warmth and, via a halo effect, increase perceived competence? Or would this strategy backfire and, by conveying warmth, undermine one’s competence in the audience’s eyes?

One important factor influencing the directional relationship between warmth and competence stems from whether the situation involves comparisons between multiple individuals or judgments of a single individual. Comparative contexts – in which perceivers judge multiple targets – create a hydraulic or negative relationship between competence and warmth judgments, especially when only two people are being judged (Judd et al., 2005). For example, this dynamic is likely to manifest in hiring decisions when it comes down to deciding between two finalists – one seen as especially warm (“a great community member,” or a “great person to have around”) and the other as especially competent (“really sharp,” or “the smartest person we’ve seen”). Such comparisons not only lead decision-makers to view each candidate as especially strong on one dimension, but to assume weakness on the other dimension: the ‘warm’ candidate gets viewed as relatively less competent, and the ‘competent’ candidate as relatively less warm when compared as opposed to judged separately. Strength on one dimension becomes an (inaccurately) assumed weakness on the other. And these mixed patterns are reinforced through behavioral confirmation; for high-warmth targets, perceivers seek information confirming low competence; for high-competence targets, an opposite pattern emerges (Kervyn et al., 2009). Returning to the hiring example, once the person or committee making the hiring decision labels one candidate as especially warm and another as especially competent, they become more attuned to gathering and remembering information suggesting that the first candidate may not be as skillful as the second, and that the second candidate is not as sociable as the first.

In sum, when judging others and presenting the self, leaders would do well to realize that whether the situation involves comparisons between multiple targets or the evaluation of a single target represents a critical cue to how perceived warmth and competence are likely to be related. In the comparative context, contrast effects are likely (e.g., high warmth = low perceived competence), whereas in non-comparative contexts, halo effects tend to occur. Later we detail how group stereotypes can also determine whether warmth and competence are perceived as going hand in hand or in opposite directions. But first we consider another part of the puzzle: why it is easier, even when perceivers initially have doubts, for targets to establish and maintain perceived competence, but much more difficult to establish and maintain perceived warmth.

1.1.3. *Valence and perceived diagnosticity of warmth vs. competence judgments*

How many good acts does it take to restore impressions of warmth or morality when someone has committed one cold act that took serious advantage of others? How many successes does it take to restore an image of competence when someone has had a significant failure? Is it easier to restore perceived warmth or perceived competence? Research confirms what most readers have probably guessed: once a person is suspected to lack warmth, it becomes extremely difficult to reestablish perceived warmth through apparently warm actions (e.g., charitable giving). By contrast, perceived competence can be restored by new successes. Put another way, *negative* information (e.g., a single self-interested act, such as swearing the company is in great shape while selling one’s personal stock based on inside

information about an impending crisis) looms larger than positive acts when judging warmth. By contrast, *positive* information (e.g., a splashy success such as landing a big account that seemed unobtainable) looms larger than negative information when judging competence. In short, perceived warmth is more easily lost and harder to regain compared to perceived competence (Kubicka-Daab, 1989; Reeder, Pryor, & Wojciszke, 1992; Singh & Teoh, 2000; Skowronski & Carlston, 1987; Tausch, Kenworthy, & Hewstone, 2007; Ybarra & Stephan, 1999).

Asymmetry between how perceivers weight information about warmth and competence can stem from the perceived diagnosticity of information related to each dimension. Specifically, once an impression of another person is formed, if we perceive the individual as competent, we favor information learned later that confirms this impression – so long as that individual has some continued successes, we tend to discount their failures. By contrast, one salient instance that contradicts a person's perceived warmth has outsized influence on impressions. In other words, once enthroned on the pedestal of competence, individuals tend to catch a break for periodic failures, but one instance of cold behavior may be enough to change warmth impressions for the worse (Kubicka-Daab, 1989; Reeder et al., 1992; Singh & Teoh, 2000; Skowronski & Carlston, 1987; Tausch et al., 2007; Ybarra & Stephan, 1999).

This effect even holds when perceivers are judging associates of the primary target. For example, in social networks, negative information about warmth and positive information about competence are viewed as transitive: once we perceive someone as unfriendly or as intelligent, we view others in the individual's social network – even if only indirectly connected (i.e., a friend of a friend) – as similarly unfriendly or intelligent (Wang & Cuddy, 2010). But perceiving someone as friendly or as unintelligent does not carry the same weight, failing to affect impressions of others in the individual's network.

Why does this asymmetry occur? As suggested above, the focus on information that disconfirms warmth stems from concerns about others' intentions or motives (Reeder, Kumar, Hesson-McInnis, & Trafimow, 2002). Consider which represents a more costly mistake – suspicion toward someone who turns out to have good intentions or naively trusting a person with bad intentions. While the former mistake might cause an opportunity for a productive association to be lost, the latter risks making oneself highly vulnerable to a malevolent backstabber. Moreover, people understand that the malevolent other has incentive to appear to be warm and well-intentioned, and people have the sense that warmth can more easily be 'faked.' Thus, people are highly attuned to evidence that disconfirms warmth.

For example, imagine a politician who kisses babies, shakes constituents' hands, and appears to truly listen to voters. The carefully built impression of warmth and morality can be quickly undone by one salient disconfirming incident, such as being caught making a cutting remark about the masses on an open microphone. Just as in politics, in both social life and organizational settings we realize that others generally have instrumental reasons for enacting warmth – to network, ingratiate with superiors, gain cooperation from subordinates, etc. Thus, warm behavior can be discounted as motivated by "trying to get something" rather than genuine interest in or concern for others. Because cold behaviors go against the social grain, people view them as highly diagnostic. Cold behaviors create suspicions that are extremely difficult to overcome. Thus, leaders must be especially vigilant not to leak signals that suggest overly self-interested intentions.

Why are competence impressions asymmetrical in the opposite way from warmth impressions? Like warmth, perceivers assume that others will generally attempt to foster an impression of competence. Crucially, however, and unlike warmth, competent behaviors are not viewed as easy to fake (Reeder et al., 2002). If we initially perceive a person as incompetent, we presume that however much they may want to, they will never demonstrate competence. Thus, as Tausch et al. (2007) demonstrate, competence impressions respond more quickly to positive competence information because competence (unlike warmth) cannot be intentionally "turned on" unless the individual possesses the requisite skills. In short, achievements are highly diagnostic of competence, whereas prosocial acts might indicate either a warm disposition or manipulative ingratiation (making them less diagnostic). Put another way, because incompetent individuals cannot regularly produce competent behavior the way that cold individuals can fake being nice, positive behaviors carry more weight on the competence dimension (Skowronski & Carlston, 1987). Furthermore, even competent individuals are expected to occasionally fail at complex tasks because task difficulty can overcome skill (Tausch et al., 2007). In other words, people expect competent individuals to behave competently most, but not all, of the time. The occasional failure will not undermine established impressions of another's competence, especially when task difficulty is high. Thus, negative information about competence does not carry the same weight as negative information about warmth.

In addition, asymmetries in how people weight information on each dimension can be influenced by how a person is perceived on the other dimension. In particular, when dealing with others they view as cold, people become sensitized

to behavior that diagnoses competence, especially in potentially competitive situations, such as negotiations. The competence of an enemy potentially has greater importance than the competence of a friend because the enemy can use his or her competence to harm (Peeters, 2001). The tendency to look for signs of an enemy's competence can lead to exaggerated, inaccurate views and, as a result, poor decisions. For example, exaggerating a competitor's strength might lead a board of directors to avoid entering a market where the competitor actually has vulnerabilities (e.g., Erber & Fiske, 1980; Skowronski & Carlston, 1987; Tausch et al., 2007; Ybarra & Stephan, 1999).

In sum, leaders would do well to realize the asymmetries that affect impressions of warmth and competence, both when making judgments about others and managing the impression they convey to others. Perhaps the most applicable observation concerns vigilance about letting impressions on one dimension govern impressions about the other. While many leaders may already be aware of the potential for halo effects, recent research suggests that they must also be aware of avoiding hydraulic assumptions about each dimension in comparative contexts. Both halo and contrast effects can impair accurate decision-making. By contrast, the asymmetry in how observers weight positive versus negative information on each dimension may often be rational and warranted. For example, a job candidate's rude behavior should be weighted more heavily than the standard politeness that a job interview typically fosters. However, leaders can apply the principle that it is much easier to lose perceived warmth than perceived competence in their self-presentations. While many leaders may be more concerned about maintaining their perceived aura of competence and less vigilant about avoiding behaviors that suggest a lack of warmth, research suggests that leaders would be wise to reverse this priority since a single cold behavior undermines perceived warmth much more readily than a failure undermines perceived competence.

2. Social categories as cues to warmth and competence

Warmth and competence also emerge as the fundamental dimensions in people's judgments of groups (i.e., stereotypes; Cuddy, Fiske, & Glick, 2007; Cuddy et al., 2008; Cuddy et al., 2009; Fiske, Cuddy, & Glick, 2002). Stereotypes are ubiquitous, both as cultural artifacts to which everyone is constantly exposed and, consequently, habits of mind that frequently influence perceptions of others. Organizational decision-makers are not immune to the influence of stereotypes, which can affect perceptions and evaluations of others without conscious awareness and in spite of the perceivers' best intentions. Even when based only on a kernel of truth, stereotypes place unique individuals into broad categorical boxes, leading organizational decision-makers to make unfair and inefficient judgments and evaluations. For example, sorting people into work roles or assignments by stereotypes rather than accurate assessments of individual talents places a drag on productivity, reduces worker morale, and fosters employment discrimination lawsuits. In a world where organizations must manage an increasingly diverse and international workforce, understanding how stereotypes operate and how managers can avoid them has become more important than ever.

Stereotypes cohere into fundamental dimensions of *warmth* and *competence* that combine to create specific patterns of emotion and behaviors toward members of various social groups. These stereotype dimensions and the distinct forms of discrimination they foster apply to a wide range of groups that are increasingly represented in the modern corporation's workforce, including women, ethnic minorities, and people of different nationalities. In contrast to past theories that assumed stereotypes of women, minorities, and foreigners are predominately negative and hostile, we show how many groups are stereotyped ambivalently – as competent but cold or as warm but incompetent. In other words, just as when two individuals are compared, when ambivalent stereotypes become activated, perceivers assume a negative relationship between warmth and competence (e.g., that high warmth indicates low competence). As a result, ambivalent stereotypes create more complex, though predictable patterns of discrimination than simple hostility would suggest. Knowing which form of ambivalence a group faces can help organizations to better understand when and how stereotypes are likely to be applied and where to concentrate their efforts to combat organizational discrimination.

Specifically, the Stereotype Content Model (SCM) of prejudice (Cuddy et al., 2008; Fiske, Glick, & Xu, 2002b) and the Behaviors from Intergroup Affect and Stereotypes (BIAS) Map (Cuddy et al., 2007) reveal how stereotypes lead to behavioral discrimination toward, and biased interpretations of, actions by members of different groups. The SCM, which has been validated in more than twenty different cultures (Cuddy et al., 2008, 2009; Fiske & Cuddy, 2006), highlights distinct, but coordinated and predictable, patterns of prejudice – with each warmth/competence stereotype combination creating a unique set of emotions (admiration, envy, pity, or contempt) and behaviors (active versus

passive and facilitating versus harmful) toward groups in each stereotype category. Because competence stereotypes lead to respect whereas warmth stereotypes elicit affection, ambivalently stereotyped groups receive one but not the other: respect but dislike, or affection but disrespect. Each form of ambivalence results in discrimination, but in distinctly different ways.

The SCM and BIAS Map account for previously puzzling patterns of ambivalent intergroup discrimination. Paternalistic prejudice, experienced by stereotypically warm but incompetent groups (e.g., the elderly, disabled, and traditional “types” of women), is subjectively affectionate, but results in patronizing behavior that insidiously undermines the efficacy of members of these groups (e.g., Dardenne, Dumont, & Bollier, 2007). As a result, members of paternalized groups may be shunted into low-level roles that emphasize social skills (e.g., customer service) but offer few routes to advancement (Vescio, Gervais, Snyder, & Hoover, 2005). Due to past conceptions of prejudice as hostility, researchers have largely ignored this kind of prejudice, which recent research suggests may have surprisingly powerful effects. By contrast, envious prejudice, directed toward stereotypically competent but cold groups (e.g., “model minorities” and nontraditional “types” of women), cedes competence to group members. As a consequence, they may be viewed as suited to technical roles, but lacking the social skills that are increasingly viewed as important in managerial and leadership positions with the rise of the transformational leadership style (Rudman & Glick, 1999). Due to envied groups’ general track record of success, organizations may fail to realize that they nevertheless face specific types of discrimination and social backlash that can create needless organizational conflict and underutilization of their talents.

2.1. Outcomes of warmth and competence stereotypes

The BIAS map (Cuddy et al., 2007; Fig. 1), an extension of the SCM, demonstrates how warmth and competence judgments shape emotions and behaviors in social interactions.

2.1.1. Consequences for emotions

The four combinations of high versus low warmth and competence judgments create four unique emotional responses: admiration, contempt, envy, and pity (Caprariello, Cuddy, & Fiske, 2009; Cuddy et al., 2004, 2007; Fiske, Cuddy, et al., 2002; Fiske, Glick, et al., 2002). Social comparison-based (Smith, 2000) and attributional (e.g., Weiner, 2005) models of emotion informed our predictions. Upward assimilative social comparisons to people seen as warm and competent (e.g., ingroups; Fiske, Cuddy, et al., 2002) elicit *admiration*, while downward contrastive comparisons

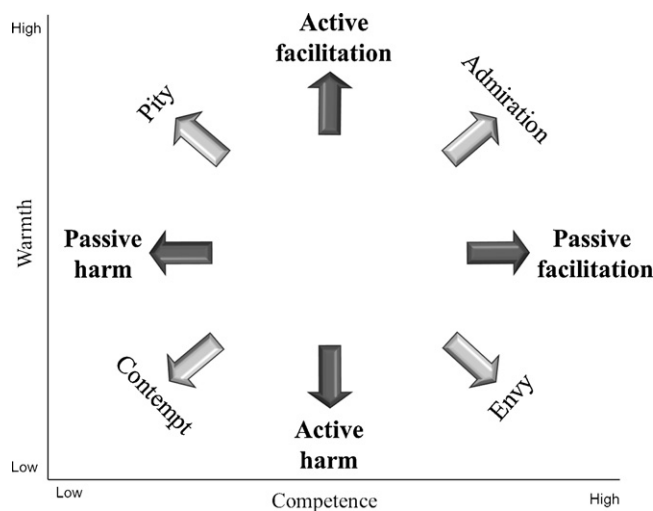


Fig. 1. Stereotype content model predictions for emotions and BIAS map predictions for behaviors in the warmth by competence space. Stereotype content (high or low warmth and high or low competence) is represented by the horizontal and vertical axes. Emotions are represented by the lighter arrows and behavioral orientations by the lighter arrows within the figure.

Adapted from Cuddy et al. (2007).

made to people seen as cold and incompetent elicit *contempt* (e.g., poor people; Dijker, Koomen, van den Heuvel, & Frijda, 1996; Fiske, Cuddy, et al., 2002). Outgroups eliciting contempt are often dehumanized (Fiske, Harris, & Cuddy, 2004), failing to even activate the area of the brain that recognizes human faces (Harris & Fiske, 2006).

In contrast to the two extremes of admiration and contempt, envy and pity are ambivalent emotional reactions. *Envy* is elicited by upward contrastive comparisons made to people perceived as competent but not warm (e.g., Asians; Fiske, Glick, et al., 2002; Lin, Kwan, Cheung, & Fiske, 2005; e.g., Jews; Fiske, Glick, et al., 2002; Glick, 2002, 2005), while *pity* is elicited by downward assimilative comparisons made to people perceived as warm but not competent (e.g., the elderly; Cuddy & Fiske, 2002; Cuddy et al., 2005; Cuddy et al., 2007; Fiske, Glick, et al., 2002). In the following sections, we address each quadrant in turn, focusing on the role of emotions.

Admiration. High-status groups that are dominant, mainstream ingroups, reference groups, or close allies are not seen as not competing with societal ingroups. These high-status groups tend to elicit admiration or pride because they serve as societal reference groups or further the interests of such groups. Pride targets others who attain favorable outcomes (e.g., high status) that also have positive implications for the self. Pride results from self-relevant, positive, controllable outcomes (Weiner, 1985). Pride and self-esteem follow positive outcomes attributed to the self, and by extension, to one's group or reference group. The successes of close others engender positive feelings, as long as others' successes are in a domain that does not create an unfavorable comparison to the self (Tesser, 1988). Similarly, because one can assimilate the self to the ingroup, close allies, or societal reference groups, the success of these larger entities can be an occasion for pride, rather than envy, such as when a sports fan celebrates their team's success (Cialdini et al., 1976). Thus, upward, assimilative social comparisons elicit admiration and pride, which should be directed toward successful ingroups, reference groups, and close allies.

Contempt. Low-status, competitive groups seen as incompetent and cold receive what we have termed contemptuous prejudice. Perceived as "freeloaders," these groups evoke feelings of anger, contempt, disgust, hate, and resentment. People feel anger toward those who are perceived as responsible for their own negative outcomes (Weiner, 1985) and who are seen as a menace and drain on the rest of society. For example, conservatives tend to attribute poverty to internal and controllable individual causes, reacting with blame and anger, rather than pity, toward victims (Zucker & Weiner, 1993). Dijker's and colleagues' (1987, 1996) research investigating native Dutch perceptions of Surinamese versus Turkish or Moroccan immigrants illustrates this link. Turkish and Moroccan immigrants to the Netherlands are primarily Muslim and work in low-wage jobs. Their religious beliefs and status stemming from their low-wage jobs are perceived by native Dutch as choices within the immigrants' control, rather than uncontrollable circumstances. As a result, the native Dutch are more likely to feel contempt toward immigrants of Turkish and Moroccan descent than toward other minorities.

Similar dynamics occur with racism. For example, White Americans feel contempt toward Blacks when they perceive Black poverty to be the result of lack of ambition, whereas when Whites focus on causes such as historical discrimination, pity becomes a more likely reaction (Scott, 1997). Child abuse, drug addiction, obesity, and AIDS are additional examples eliciting a high degree of anger because they are seen as controllable, blameworthy stigmas (Weiner, Graham, & Chandler, 1982; Weiner, Perry, & Magnusson, 1988). More specifically, people who react with anger and contempt toward individuals with AIDS tend to believe homosexuality is both immoral and a personal choice (Dijker, Kok, & Koomen, 1996). In addition, when homelessness is seen to be the result of controllable factors such as drug abuse or laziness, it also engenders anger (Barnett et al., 1997). In general, when controllability is manipulated for a variety of stigmas, it elicits perceived responsibility, blame, and anger (Rush, 1998).

Envy. Envious prejudice occurs when competent but cold groups elicit feelings of envy and jealousy. The positive side of envious prejudice is that such groups are perceived as competent and therefore responsible for their own high status and successes, but on the negative side, they are seen as competitors who lack warmth and could potentially have hostile intent. People feel envy when they lack another's superior, desired outcome (Parrott & Smith, 1993). These upward contrastive (i.e., competitive) social comparisons elicit dislike and resentment toward the competent but cold group (Smith, 2000). Envy simultaneously involves the self and the other – a comparison that positions the self at a disadvantage.

Envy fosters feelings of hostility and depression (Smith et al., 1994). The hostility characterizes the outgroup's superior position as illegitimate, while the feelings of depression focuses on one's own sense of inferiority. Given that acknowledging feelings of envy toward another group implies one's own inadequacy, people are less likely to honestly report having felt envious, which makes it difficult to measure (Spears & Leach, 2004). It is often couched as righteous indignation of the other's presumably illegitimate gain (Smith, 1991). Thus, even though envied groups have the

capability to provoke anger under certain conditions, anger is not uniquely expressed upward toward these competent but cold groups because it also can be directed downward, toward low-status, competitor groups. As a result, envy, rather than anger or resentment, seems the more appropriate label for attitudes toward high-status, competitive groups.

Pity. Pity is a paternalistic form of prejudice elicited by low-status, noncompetitive groups seen as warm but incompetent. Elderly people, disabled people, and working mothers are all examples of groups that fall into this category. Additionally, Black people may sometimes elicit pity through the assumption that they have experienced disadvantages beyond their control (due to racism and poverty). For example, the history of racism in American can be viewed as alternating between paternalistic pity and contempt, depending on whether disadvantages experienced by African-Americans are viewed as self-inflicted or the result of Whites' oppression (Katz & Hass, 1988; Scott, 1997).

Pity is primarily expressed toward groups that experience negative outcomes resulting from causes they cannot control (Weiner, 1980, 1985). People express sympathy and pity toward individuals with physical disabilities (e.g., Alzheimer's disease, blindness, cancer, heart disease) that are perceived as uncontrollable (Weiner et al., 1988). One experiment asked students to describe times they pitied others, and the most common stories referred to people with physical disabilities or victims of environmental disasters (Weiner et al., 1982). In the case of poverty, pity was only elicited when it was viewed as the result of external and uncontrollable societal causes (Zucker & Weiner, 1993). In addition, many stigmatizing conditions including blindness, cancer, AIDS, drug abuse, obesity, and homelessness all engender feelings of pity when seen as the result of uncontrollable causes (Rush, 1998). However, when these same conditions – especially AIDS, drug abuse, obesity, and homelessness – are perceived to have been caused by the victim's own actions, pity is reduced (Dijker, Kok, et al., 1996). Generally, physical stigmas elicit pity because they are perceived to be caused by factors outside the victim's control, whereas mental-behavioral stigmas fail to elicit pity because the causal factors are perceived to be within the victim's control (Stipek et al., 1989; Weiner et al., 1988).

Summary. The emotional prejudice hypotheses in the SCM state: admiration is concerned primarily with high-status, noncompetitive reference groups in the mainstream that are perceived as warm and competent; contempt is concerned with low-status groups perceived as competitive (e.g., freeloading); envy is concerned with high-status, competitive groups perceived as competent but cold, and finally pity is concerned with low-status, noncompetitive groups perceived as warm but incompetent.

2.1.2. *Consequences for behavior*

The four perceptual combinations of high versus low warmth and competence also elicit four unique patterns of behavioral responses: active facilitation (e.g., helping), active harm (e.g., harassing), passive facilitation (e.g., convenient cooperation), and passive harm (e.g., neglecting) (Cuddy et al., 2007).

Warmth and competence judgments elicit active and passive behaviors, respectively. As the warmth dimension is primary, given that it reflects others' intentions, perceived warmth predicts active behaviors: people judged as warm elicit active facilitation (i.e., help), whereas those judged as lacking warmth elicit active harm (i.e., attack). The competence dimension is secondary because it assesses others' capability to carry out intentions, and therefore predicts passive behaviors: people judged as competent elicit passive facilitation (i.e., obligatory association, convenient cooperation), whereas those judged as lacking competence elicit passive harm (i.e., neglect, ignoring). In short, each warmth-by-competence combination elicits a distinct type of discrimination (Asbrock & Cuddy, in preparation; Becker & Asbrock, 2011; Cuddy et al., 2007).

Discrete emotions also elicit specific behaviors (Becker & Asbrock, 2011; Cuddy et al., 2007). The BIAS map (see Fig. 1) connects the four kinds of emotions – corresponding to the four warmth–competence combinations – to predict behaviors. Specifically, admired (i.e., competent and warm) groups elicit both active (i.e., helping) and passive facilitation (i.e., both helping and associating). Resented (i.e., incompetent and cold) groups elicit both kinds of harm: active attack and passive neglect, such as the history of both brutal (e.g., lynching) and neglectful (e.g., devoting fewer resources to inner city neighborhoods) toward African-Americans. The ambivalent combinations are more volatile: pitied groups elicit both active helping and passive neglect, aptly describing patronizing behavior toward older and disabled people, who may sometimes be over helped and other times neglected. People who are institutionalized can also experience active help and passive neglect. Active facilitation is more likely to be directed toward pitied groups when their perceived warmth is salient; passive harm is directed toward pitied groups when their perceived lack of competence is salient (Becker & Asbrock, 2011). In contrast, envied groups elicit both passive association and active harm. For example, people may shop at the stores of entrepreneurial outsiders under normal circumstances (i.e., “going along to get along”), but under societal breakdown, these same people may attack and loot these same shops.

Koreans in Los Angeles, Tutsis in Rwanda, Chinese in Indonesia, and Jews in Europe are examples of groups that have experienced such treatment. As with the pitied groups, the salience of the relevant dimension determines when envied groups are actively harmed versus passively facilitated; when their perceived low warmth is salient, they elicit active harm, but when their perceived high competence is salient, they elicit passive facilitation (Becker & Asbrock, 2011).

The BIAS map, consistent with appraisal theories of emotion, predicts that emotions are the proximal cause of social behaviors. This finding is supported by meta-analyses of cognitive stereotypes and emotional prejudices as predictors of discrimination (Dovidio, Brigham, Johnson, & Gaertner, 1996; Talaska, Fiske, & Chaiken, 2007). Our own correlational and experimental evidence consistently support the BIAS map prediction that emotions more strongly and directly predict behaviors because they mediate the link from warmth and competence judgments to behaviors, both at the intergroup (e.g., Cuddy et al., 2004, 2007) and interpersonal levels (Asbrock & Cuddy, in preparation; Talaska et al., 2007).

2.2. *Specific ambivalent cases*

2.2.1. *Warm but incompetent*

Groups that are consistently stereotyped as warm but incompetent are especially disadvantaged in professional settings because they stereotypically lack the trait most salient in these settings – competence. Women often face this challenge, given that they have historically been viewed as lacking competence relative to men (e.g., Broverman, Broverman, Vogel, Clarkson, & Rosenkrantz, 1972). This presents a ‘lack of fit’ problem: women are seen as less competent or agentic than men, and, as a result, are not hired into male-dominated occupations (Cejka & Eagly, 1999; Eagly, 1987; Glick, Wilk, & Perreault, 1995; Heilman, 1983), a dynamic that has been especially well documented in the leadership domain (Eagly & Karau, 2002; Heilman, 1983; Prentice & Carranza, 2002).

Recently researchers have begun to look at how parental status interacts with gender to produce workplace discrimination. Women suffer a per child wage penalty of 5 percent, even after controlling for relevant human capital and occupational factors (Budig & England, 2001; Anderson, Binder, & Krause, 2003). When working women become mothers, activating a traditional role, they lose perceived competence and gain perceived warmth (Cuddy et al., 2004). In a study of perceptions of management consultants, people expressed less interest in hiring, promoting, and further training a working mother as compared to a childless female worker (Cuddy et al., 2004). While working mothers gain perceived warmth, only perceived competence predicted positive behavioral intentions regarding hiring, promotion, and education. These laboratory results mesh with a recent field study, which showed that employers were less likely to call back working mothers (than women without children) applying for professional jobs (Correll, Benard, & Paik, 2007). In a related experiment, participants held working mothers to higher performance and punctuality standards, in comparison to men and childless women (Correll et al., 2007). Consistent with the BIAS map, such discrimination reflects passive (though severely damaging) harm; the boost in working mothers’ perceived warmth does not help them professionally, whereas their apparent loss in perceived competence hurts them.

Similarly, elderly people are stereotyped as warm but incompetent (Andreoletti, Maurice, & Whalen, 2001; Cuddy & Fiske, 2002; Cuddy et al., 2005; Fiske, Xu, Cuddy, & Glick, 1999; Fiske, Glick, et al., 2002; Heckhausen, Dixon, & Baltes, 1989; Hummert, Garstka, O’Brien, Greenwald, & Mellott, 2002; Kite, Deaux, & Miele, 1991; Rubin & Brown, 1975), falling into the cluster that also contains disabled and retarded people (Cuddy et al., 2007; Fiske et al., 1999; Fiske, Glick, et al., 2002). As a result, people tend to express pity and sympathy toward elderly people. Although less studied than gender stereotypes, age trumps gender when people are asked to form quick impressions (Kite et al., 1991). Age stereotypes can lead to organizational discrimination through confirmation biases. For example, when an older person fails to remember something, perceivers attribute the memory failure to intellectual incompetence, whereas the same failure by a younger adult is viewed as a temporary lapse due to inattention (Erber & Prager, 1999; Erber et al., 1992; Erber et al., 1996). Within organizations, older employees are viewed as less effective than younger employees in various job-related tasks (Avolio & Barrett, 1987; Rosen & Jerdee, 1976a,b; Singer, 1986). In contrast, empirical studies have shown that older employees exhibit at least as much, and sometimes more, job competence than younger employees (McCann & Giles, 2002).

Although some suggest that East Asian, collectivistic cultures are less ageist (due to their greater emphasis on filial piety; Sung, 2001), our own and others’ cross-cultural data suggest otherwise. We asked people in a variety of nations (Belgium, Costa Rica, Hong Kong, Japan, Israel-Jewish, Israel-Muslim, South Korea) to rate a number of groups, including elderly people. In all samples, participants viewed the elderly as significantly more warm than competent

(Cuddy et al., 2009). Most interestingly, in the three most collectivistic samples – Hong Kong, Japan, and South Korea (a) the elderly were viewed as more warm than competent and (b) significantly higher in warmth and lower in competence than means collapsed across all other groups. As expected and consistent with the SCM, elderly people were viewed as low in status and noncompetitive. These findings are consistent with other data from Hong Kong (Harwood et al., 1996), China (Tien-Hyatt, 1986/87), Japan (Koyano, 1989), Taiwan (Tien-Hyatt, 1986/87), and Thailand (Sharps et al., 1998). In short, considerable evidence suggests that paternalistic ageism is pancultural.

Moreover, the elderly stereotype seems to be stubborn. In a study that manipulated the competence of an elderly man, positive competence information did not affect perceivers' competence ratings, although it did decrease the elderly target's perceived warmth (Cuddy et al., 2005). The negative aspect of the elderly stereotype (incompetence) resists revision, whereas the positive aspect (warmth) is more malleable. In addition, the elderly target who behaved more incompetently also gained in warmth. Thus, an incompetent elderly target was rewarded on his group's positive stereotype (warm) for behaving consistently with his group's negative stereotype (incompetent). This suggests that when members of ambivalently stereotyped groups behaviorally confirm their negative stereotype (e.g., incompetence), they may inadvertently enhance their positive stereotype (e.g., warmth).

2.2.2. *Competent but cold*

Groups stereotyped as competent but cold may generally fare better in the workplace than groups stereotyped as warm but incompetent, but these groups also face disadvantages (Rudman & Phelan, 2008). For example, women who demonstrate their competence risk being assimilated into a “nontraditional woman” stereotype that creates a perceived warmth deficit. To the extent that social skills and ability to connect with others has become a desired leadership trait, perceived lack of warmth can lead to discrimination in hiring and promotion decisions (Rudman & Glick, 1999). Some ethnic minorities and nationalities also typically receive competent but cold stereotypes that may lead perceivers to see them as well suited to technical and analytic roles, but (increasingly) unsuited to leadership because of an assumed inability to “connect with” others.

The competent but cold stereotype tends to occur toward “model” minorities such as Asian Americans, who are viewed as highly competent (e.g., intelligent, capable, ambitious, hard-working, mathematical, skillful, and self-disciplined; Cuddy et al., 2007; Fiske, Glick, et al., 2002; Ho & Jackson, 2001; Kao, 2000; Lin et al., 2005; Yee, 1992). In the earliest study on stereotype content, White Americans rated the Japanese as intelligent and industrious (Katz & Braly, 1933); contemporary research suggests that this stereotype has remained constant. Asian American stereotypes, however, are negative on the warmth dimension, with such characterizations as cunning, sly, selfish, nerdy, and lacking interpersonal warmth and kindness (Cuddy et al., 2007; Fiske, Cuddy, et al., 2002; Ho & Jackson, 2001). Highly endorsed items on the recent Scale of Anti-Asian American Stereotypes (Lin et al., 2005) include “Do not interact smoothly in social situations,” “Do not know how to have fun and relax,” and “Commit less time to socializing than other groups.”

Ambivalent stereotype content toward Asian Americans directly translates to ambivalent emotions (Cuddy et al., 2007; Fiske, Cuddy, et al., 2002; Ho & Jackson, 2001; Lin et al., 2005). Not surprisingly, people who endorse negative stereotypes that Asian Americans lack warmth exhibit negative attitudes, emotions, and behaviors toward members of this group (e.g., Lin et al., 2005). Importantly, endorsing positive stereotypes of Asian American competence has ambivalent emotional consequences (Ho & Jackson, 2001). Specifically, people who characterized Asian Americans as highly competent (intelligent, ambitious, skillful) said that they admired and respected Asian Americans, but also reported hostility and jealousy (Ho & Jackson, 2001), consistent with the notion of envious prejudice.

Thus, while being stereotyped as competent has clear advantages, the competent but cold gestalt carries significant disadvantages for groups stereotyped in this manner. Although societies typically value such traits as hardworking, intelligent, and ambitious, the perceived competence of stereotypically competent but cold groups leads others to view such groups as a threat (e.g., to educational, economic, and political opportunities). Recall that when others lack perceived warmth, their behavior is assumed to be highly self-interested, untempered by empathic concern for others. Thus, others who are viewed as cold represent a potential threat and perceived competence greatly intensifies the magnitude of that threat, resulting in negative attitudes and emotions. In a series of studies, Maddux, Galinsky, Cuddy, and Polifroni (2008) showed that perceived threat mediated the relationship between Asian-American stereotypes (both negative and positive) and negative attitudes and emotions.

Extensive evidence has shown that female leaders consistently fall into the competent-cold cluster (for a review, see Rudman & Phelan, 2008). As Carly Fiorina, Former CEO of HP, has said, “I’m either a ‘bimbo’ or a ‘bitch’,” (Fiorina,

2006, p. 173), suggesting that powerful women must trade perceived sociability for perceived competence. Stereotypes of men and men's social roles substantially overlap with the expectations for effective organizational leadership, but stereotypes of women and women's roles do not (Eagly & Karau, 2002). Women who violate "prescriptive stereotypes" – expectations for how a group *should* behave – often experience negative reactions in the form of social and economic sanctions, an effect known as "stereotype backlash" (e.g., Rudman & Glick, 1999; Rudman & Glick, 2001). As Rudman and Phelan write, "Although women must present themselves as self confident, assertive, and competitive to be viewed as qualified for leadership roles, when they do so, they risk social and economic reprisals" (Rudman & Phelan, 2008, p. 64). Highly competent women and successful female managers are viewed as capable of leadership, but also as hostile, selfish, devious, and lacking social skills – by both male and female perceivers (Heilman, Wallen, Fuchs, & Tamkins, 2004; Rudman & Glick, 1999; Rudman & Glick, 2001).

3. Consequences of warmth and competence judgments in organizations

3.1. Personnel selection, role assignments, and task assignments

Determining who gets hired for which type of job or gets assigned particular task may depend on the match of the stereotype to the job. For example, members of stereotypically warm but incompetent groups (e.g., women) may be disproportionately hired for jobs such as cashier – where sociability may be prized, but the task is deemed to be simple – while members of stereotypically competent but cold groups (e.g., Asians) may be hired for technical roles deemed to require competence but not social skills. Neither of these ambivalently stereotyped groups may be viewed as suitable for managerial roles deemed to require both competence and warmth. And members of stereotypically incompetent and cold groups may be relegated to the lowest status roles (e.g., janitorial work) perceived to require little competence and few social skills. These ideas hold not just for hiring decisions, but also for subsequent assignment to both formal role and task assignments (e.g., which person on a team is tapped to do research versus interact with clients) and informal role and task assignments (e.g., who is expected to organize the office party). Such role and task assignments can influence whether individual employees get an opportunity to demonstrate success at valued tasks or are put into the types of roles that typically result in promotions, affecting subsequent career paths.

3.2. Evaluation, assessment, and promotion

Evaluation and assessment of employees often necessarily has a subjective component that makes employees vulnerable to stereotypic biases. For example, how is an employees' failure at a task interpreted – as reflecting a laudable attempt to do something difficult and risky or as indicating a lack of competence? Or how is an employee's potentially rude behavior to a client explained – as a misunderstanding or an indication of an irremediable lack of social skills? The answers to these questions can strongly influence evaluations and promotion decisions. The SCM suggests how people tend to use competence stereotypes to guide their evaluations of achievement successes and failures. This leads evaluators to fully credit members of stereotypically competent groups for their successes and excuse their failures, but to do the opposite with members of stereotypically incompetent groups, whose successes are dismissed as lucky and whose failures are seen as dispositional. Warmth stereotypes guide explanations for social behavior, leading evaluators to assume that nice behaviors by members of stereotypically warm groups are due to their natural dispositions while excusing cold behaviors as flukes. By contrast, when members of stereotypically cold groups act in a warm way, evaluators may suspect they are being manipulative or currying favor for ulterior motives. As leadership positions are increasingly viewed as requiring both warmth and competence, members of ambivalently stereotyped groups may find themselves excluded, but for different reasons – some groups for lacking competence, other groups for lacking warmth.

3.3. Effective team functioning and managing diversity

Because stereotypes are so pervasive, they affect how teams function. For example, teams may elect to split up tasks along stereotyped lines (e.g., allocating social roles to women) even when this means failing to put individuals into their optimal roles. Stereotypes may also affect whether an individual's contribution is viewed as credible (e.g.,

dismissing the technical ideas of a member of a stereotypically warm but incompetent group without fully considering the merit of the ideas). To effectively manage diversity requires that team members be educated to avoid the pitfalls of the different types of stereotypes toward specific groups.

3.4. *How to avoid making (or acting on) biased warmth and competence judgments*

To overcome making biased warmth and competence judgments, people must be mindful to try to avoid taking shortcuts. It is virtually impossible to completely eschew the use of stereotypes, but, when facing personnel decisions, managers should push themselves to be aware of how they form impressions – by trying to avoid sizing people up on the basis of stereotypical perceptions of warmth and competence, and by separating the two dimensions, understanding that it is not a zero sum game: warmth and competence are not mutually exclusive. Managers should ask themselves, for example, whether that highly competent technician also has social or customer skills that could be useful to the company. These simple exercises could help managers see past social categories and recognize individual s' true talents, thus avoiding the high cost of mistaken judgments. But organizations cannot merely tell their members “don't be biased”; combating stereotypes must occur through organizational structures and policies that have the power to defuse stereotypes and encourage more accurate decision-making. We discuss some specific remedies below.

3.4.1. *Leaders' influence*

Discriminatory behavior is more likely in workplaces where established norms encourage or permit it, which serves to “release” discriminatory impulse (Crandall, Eshleman, & O'Brien, 2002). Leaders possess particular power to shape group norms (O'Reilly & Chatman, 1996) as views expressed by individuals in positions of power or authority carry extra weight, leading subordinates to be more likely to accept these views as correct and to act in compliance with them (Milgram, 1974). Thus, when organizational leaders openly express or act on stereotypes, their behavior conveys permission to others to behave in discriminatory ways (Crandall, Eshleman, & O'Brien, 2002). For example, Brief and colleagues found that when legitimate authority figures (specifically, business superiors) provided business justifications for hiring discrimination toward Blacks, subordinates tended to make discriminatory decisions (i.e., to comply with authorities; Brief, Dietz, Reizenstein Cohen, Pugh, & Vaslow, 2000).

3.4.2. *Peer influence*

Stereotypes gain added credence when their open endorsement by peers creates a perceived consensus of opinion (even though individuals may have private doubts that they fail to voice or investigate). Perceived consensus in a group or organization exerts a powerful effect over individuals' information processing. When people believe that there is a general consensus on an issue, they tend to assume that the consensus “must be” correct (Cialdini, 1993), preferentially seek out information consistent with the consensus, and reinterpret or dismiss information that disconfirms the consensual view (Snyder & Swann, 1978). Even those who have private doubts about the correctness of consensual views are likely to suppress those doubts and fail to air them publicly because of the perceived general agreement with these opinions (Asch, 1955). For example, Asch's foundational studies of the power of social conformity showed that when individuals were faced with a unanimous majority of even just 3-4 others who gave an obviously wrong answer about a simple perceptual judgment (stating which of several lines were similar in length to a target line), 75 percent caved in to group pressure and gave the wrong answer on at least some trials (Asch, 1955). When judgments are subjective, group influence increases (Cialdini, 1993). Similar conformity effects can be obtained by a lone authority because people tend to defer to authorities and accept their definition of a situation (Milgram, 1974).

Stereotype-confirming biases (seeking only confirming and dismissing disconfirming information) can be counteracted if people deliberately seek out and weigh information that might challenge established views or reveal mistaken assumptions that contribute to those views (Lord, Lepper, & Preston, 1984). For this to work, organizational leaders and policies must set the tone, explicitly demanding that evaluators seek out and weigh information that may potentially disconfirm their assumptions (Janis, 1997).

3.4.3. *Objective versus subjective criteria for personnel evaluations*

Subjective evaluation criteria may allow evaluator biases free rein (Heilman et al., 2004), making it particularly important for organizations to have safeguards in place to mitigate bias. In occupational domains where subjective

criteria represent important dimensions of evaluation, diligence is especially necessary to minimize bias. For example, instituting blind auditions (in which the candidate sits behind a screen so that his or her appearance and gender do not contaminate evaluations of musical talent) dramatically increased the number of women in major symphony orchestras from the 1970s to the 1990s. Blind auditions boosted a female musician's chances of advancing from a preliminary round by 50 percent (Goldin & Rouse, 2000).

3.4.4. *Enforcing (versus failing to enforce) non-discriminatory policies*

Stereotype bias in personnel evaluations is mitigated when evaluators are held accountable for making non-discriminatory judgments. Thus, organizations can reduce bias in the evaluation and treatment of employees by explicitly promoting egalitarian values and norms (Chen, Shetter, & Chaiken, 1996; Fiske & von Hendy, 1992), holding decision-makers accountable for ensuring unbiased evaluation and compensation of employees (Tetlock, 1992), and emphasizing (to the extent possible) using objective measures to evaluate employees' performance (Fiske & Neuberg, 1990; Heilman et al., 2004). Conversely, failure to enforce official policies and managerial participation in the violation of those policies undermines them, sending the message that official policies are not to be taken seriously.

3.5. *Summary*

Stereotypes about warmth and competence can bias a wide range of organizational decisions about individual organization members. Importantly, focusing on the ways in which stereotype content affects decision-making provides a more nuanced view about potential biases. Specifically, the SCM approach contrasts with prior views that "outgroups" receive wholly negative stereotypes that, in turn, engender general hostility and discrimination toward individual group members. As detailed above, ambivalent warmth and competence stereotypes may lead to more complex patterns of discrimination depending on the relevance of each dimension to the judgment at hand. Ambivalent stereotypes can therefore create discrimination without hostility. For example, when a decision-maker, influenced by a "competent but not warm" stereotype, assigns an individual to a technical role, the individual's perceived competence provides a subjectively positive rationale for this choice. We have suggested above how warmth and competence stereotypes may influence decisions ranging from task assignments to promotion decisions, but research on such effects remains in its infancy.

Because people assume that discrimination stems from unalloyed hostility, decision-makers are unlikely to recognize ambivalent stereotyping as a form of bias. Increased awareness represents the first step to combating such biases among well-intentioned decision-makers. But, as described above, addressing bias requires systematic, multipronged organizational remedies. These include setting the tone from the top, with organizational leaders endorsing fair decision-making, a professional climate, objective evaluation criteria and processes, and strongly enforced non-discriminatory policies.

4. Warmth, competence, and self presentation

After first learning about the research on warmth and competence judgments, business audiences almost invariably ask: "How do I project warmth and competence at work or in job interviews?" Although very little research has directly addressed this question, the nonverbal behaviors (NVBs) literature provides some insights. While warmth and competence judgments are partially inferred from stereotypes about an individuals' group, people have some control over the impressions they make along the two dimensions, not only through their overt behaviors (e.g., helping a colleague finish a project, performing well in a negotiation, etc.), but also through their body language. It seems that many, if not most, NVBs do, at least at a general level, convey either warmth or competence. Assuming this is accurate, one could argue that people are constantly (and subtly) projecting warmth/coldness and competence/incompetence through nonverbal cues in virtually all of their social interactions. These NVBs shape not only how others see us but also how we see ourselves. Ultimately, these expressions of warmth and competence – intentional or not – set off a cascade of psychological and physiological phenomena that affect how we see ourselves and behave, how others see and respond to us, which, in turn, reinforce our self perceptions and cause us to behave in ways that are consistent with those perceptions. We review a sampling of these findings below, although this is by no means an exhaustive review.

4.1. Nonverbal behaviors convey warmth and competence

4.1.1. Warmth

The face and head signal warmth in a variety of ways, some of which are controllable (e.g., eye contact, nodding) and some of which are not (e.g., youthful facial features). But perhaps the most well studied, and the one we discuss here, is the Duchenne smile – the natural or “voluntary” smile that involves contraction of both the zygomatic major muscle (i.e., the muscle that raises the corners of the mouth) and the orbicularis oculi muscle (i.e., the muscle that raises the cheeks and forms wrinkles or “crow’s feet” around the eyes). Duchenne smiles reflect happiness and wellbeing (e.g., Ekman, Davidson, & Friesen, 1990), and flashing a Duchenne smile elicits positive responses from perceivers, such as pleasure and empathy (Surakka & Hietanen, 1998). For example, the extent to which restaurant servers smile predicts the customer’s liking of the server and overall satisfaction during the transaction (Barger & Grandey, 2006). Smiling not only reflects our happiness and predicts how others will see us, but it also affects how we see ourselves: unobtrusive contraction of the zygomatic major muscle increases enjoyment and positive mood; in simpler terms, participants who are forced to smile become happier, an effect known as ‘facial feedback’ (Strack, Martin, & Stepper, 1988). Moreover, smiling is contagious – people instinctively smile when looking at a smiling face (Dimburg, Thunberg, & Elmehed, 2000). In sum, smiling (1) reflects happiness and wellbeing, (2) conveys warmth and positive interest, (3) causes the person who is smiling to feel happier (i.e., facial feedback), (4) causes perceivers to like and feel more connected to the person who is smiling, to generally feel happier, and to smile more, which, (5) via facial feedback, leads the perceiver to feel happier and warmer, creating a feedback loop that reinforces feelings of warmth connection between the actor and the perceiver.

When it comes to ‘below-the-neck’ postures and movements, warmth is conveyed through NVBs that indicate positive interest or engagement (“immediacy cues”), such as leaning forward, nodding, orienting the body toward the other, and hand gestures that are relaxed but nonintrusive. Conversely, tense posture, leaning backwards, orientating the body away from the other, and tense and intrusive hand gestures (e.g., pointing) signal coldness (Carli, LaFleur, & Loeber, 1995; Mehrabian & Ferris, 1967; Spiegel & Machotka, 1974; Word, Zanna, & Cooper, 1974, Smith-Hanen, 1977). Similarly, touching and postural openness typically convey trust, affection, and equality (Burgoon, 1991). Speakers, both male and female, who exhibit warm NVBs are perceived as friendlier and more likable than speakers who do not (Carli et al., 1995). When interacting with someone who uses non-immediacy cues (e.g., leaning backwards, orienting the body away) actors reciprocate with less engagement, perform less well on a task, and perceive the person with whom they are interacting as less friendly (Word, Zanna, & Cooper, 1974). Mirroring – copying the NVBs of an interaction partner, which is mostly an unconscious process controlled by “mirror neurons” – also facilitates social interactions, leading to greater liking, empathy, and helping behavior (e.g., Chartrand & Bargh, 1999). Initial evidence suggests that the benefits of mirroring hold even in online communication: negotiators who mirrored their partner’s “warm” emoticons (e.g., smiley faces) in email or instant messaging exchanges experienced better outcomes (Swaab, Adam, & Cuddy, 2011).

Researchers studying embodied cognition – the role the body plays in shaping the mind – report compelling evidence that warmth is embodied. Participants who hold a warm (vs. cold) cup judge others as having a warmer personality and are more likely to choose a gift for a friend rather than for themselves (Williams & Bargh, 2008). When participants touch a warm pack, they invest more money in subsequent trust decisions than when they experience physical coldness (Kang, Williams, Clark, Gray, & Bargh, 2011). Warm conditions, such as a heated room, induce greater social proximity in participants, the use of more concrete rather than abstract language, and a more relational focus (IJzerman & Semin, 2009). Touching hard surfaces, such as sitting on a hard chair, leads to tougher (colder) negotiating (Ackerman, Nocera, & Bargh, 2010). The inverse is also appears to be true. Increased physical proximity to another person induces perceptions of higher temperature (IJzerman & Semin, 2010), and individuals who are socially ostracized report feeling a decrease in their own skin temperature and a greater desire for warm food and beverages, compared to people who are socially included (IJzerman et al., 2011; Zhong & Leonardelli, 2008). People seem to manage their own feelings of social warmth by regulating their physical temperature; individuals who score higher on a measure of chronic loneliness tend to take more warm baths or showers, and an increase in physical coldness increases feelings of loneliness significantly (Bargh & Shalev, 2011). In short, physical experiences of warmth, which are controllable, are bi-directionally causally related to experiences of social warmth.

4.1.2. Competence

Competence is inferred from NVBs related to dominance and power, which tend to be expansive (i.e., taking up more space) and open (i.e., keeping limbs open and not touching the torso). High-status and dominant individuals are more likely to adopt these postures, while lower-status individuals adopt contractive, closed postures (e.g., Carney, Hall, & Smith LeBeau, 2005; Hall, Coats, & Smith LeBeau, 2005). Expansive NVBs reflect people's feelings of competence; for example, college students' posture increases in erectness upon receiving a high grade on an exam (Weisfeld & Beresford, 1982).

The expression of powerful NVBs influences judgments of a person's competence and confidence, and shapes how social interactions play out. People who express high-power or assertive NVBs are perceived as more skillful, capable, and competent than people expressing low-power or passive NVBs (Cuddy, Baily, Beninger, & Gaither, 2011; Keane, Wedding, & Kelly, 1983). Positioning oneself in a dominant versus submissive pose during a dyadic interaction, such as a negotiation or a job interview, also induces a complementary embodied power experience in the interaction partner. For example, a participant who interacts with a submissive person give firmer handshakes than one who interacts with a dominant confederate (Bohns & Wiltermuth, 2011). Similarly, people who are exposed to a dominant individual decrease their postural stance, while the inverse is true for those who are exposed to a submissive individual (Tiedens & Fragale, 2003). Eye-tracking data reveal the same kind of complementarity or deference: people tend to avert their gaze more when viewing photos of individuals who are standing or sitting in high-power versus low-power poses (Cuddy, Baily, et al., 2011).

These NVBs also reinforce self-perceptions of competence and power. In fact, experimental evidence reveals that even very brief displays of these 'power poses' can significantly change the way a person feels and behaves. Individuals who adopt expansive postures report feeling more competent and powerful (Carney et al., 2005), and adopting power poses (e.g., standing with hands on the hips and feet shoulder-width apart) – for *just two minutes* – increase feelings of power and tolerance for risk, increases testosterone (dominance hormone), and decreases cortisol (stress hormone) (Carney, Cuddy, & Yap, 2010). This particular neuroendocrine profile – high testosterone and low cortisol – is associated with effective leadership (Mehta & Josephs, 2010). Power posing also causes people to take action and improves abstract thinking – both well documented psychological outcomes of possessing power (Huang, Galinsky, Gruenfeld, & Guillory, 2011).

In addition to reflecting and influencing other- and self-perceptions of competence and power, briefly posing in powerful postures *in preparation* for a high-stress situation, such as a job interview or a negotiation, may optimally configure the brain to perform more competently in those situations. Indeed, a recent experiment shows that it does (Cuddy, Wilmut, & Carney, 2011): Participants adopted, for two minutes, either high- or low-power poses. They were then subjected to an adaptation of the Trier Social Stress Test (Kirschbaum, Pirk, & Hellhammer, 1993), designed and shown to induce stress and elevate cortisol levels, in which people are told they have a few minutes to prepare a speech that they will deliver to two evaluators in a mock interview for their "dream job." They then delivered the speech, while two experimenters allegedly evaluated their performance. Several features of the job interview made it particularly stressful: (1) it was an impromptu speech, which most people find highly stressful, (2) two live evaluators were assessing the participants' performance, (3) the participants were aware that they were being videotaped, and (4) most importantly, the two evaluators were trained to provide no nonverbal feedback during the speech; in other words, the participant received no encouraging, approving, or warm feedback from either of the evaluators. Keep in mind that while delivering the speech, the participants were *not* holding the power poses; they only held the poses for two minutes before they prepared the speech. The speeches were videotaped and then coded on a variety of verbal and nonverbal dimensions by two hypothesis- and condition-blind coders. As expected, participants who had held high-power poses for two minutes before the job interview were rated as performing significantly better than the low-power posers, and were more likely to be "hired" by the coders; this effect was mediated not by content of the speech, but by how engaging and captivating the participants were while delivering it.

4.1.3. Summary

In sum, warmth and competence are clearly expressed and reinforced through body language, and these cues have strong, meaningful, and self-reinforcing outcomes in workplace interactions. Leaders can become more effective by honing their own nonverbal behaviors, which significantly impact the extent to which people trust and respect them, and by learning to understand others' nonverbal behaviors, which often communicate useful information.

Not surprisingly, some of the effects described above are moderated by gender, race, and culture. Women are expected to nonverbally express more warmth than men, and those who do not may elicit stereotype backlash. For example, eye-tracking data suggest that people are confused by, and try to make sense of, gender-stereotype-deviant postures, exhibiting more visual scanning when viewing photos of women in high-power (vs. low-power) poses, and when viewing photos of men in low-power (vs. high-power) poses (Cuddy, Baily, et al., 2011). Managers like female employees who exhibit dominant NVBs less than female employees who exhibit submissive NVBs (Bolino & Turnley, 2003).

Race also interacts with how different nonverbal behavior and expressions are perceived. For example, prior research has shown that “babyfacedness,” which is linked to perceived trustworthiness, innocence, and warmth (for a review, see Zebrowitz, 1997), is a liability for White people striving to attain high positions of leadership in government (Zebrowitz & Montepare, 2005) and industry (Rule & Ambady, 2008). However, the opposite appears to be true for Black men. The “teddy bear effect” refers to the finding that Black male CEOs are more likely to have babyfaces, and that, in terms of real earnings and achievement, the more babyfaced the Black CEO, the more prestigious was the company he led, reflected by both Fortune 500 ranking and annual corporate revenue (Livingston & Pearce, 2009). The authors suggest “babyfacedness is a disarming mechanism that facilitates the success of Black leaders by attenuating stereotypical perceptions that Blacks are threatening” (Livingston & Pearce, 2009, p. 1229). Culture also plays a role in how NVBs are interpreted. For example, perceivers are able to predict information accurately from the facial expressions of others, but they need to know the target’s culture in order to make these predictions (Rule et al., 2010). All of these factors moderating how nonverbal behaviors are interpreted – gender, race, and culture – are worthy of deeper investigation.

5. Directions for future work

Several directions for future work seem particularly important. First, related to the above discussion of self-presentation, MBA students and executives often ask which dimension is more important in how they present themselves, and how they should balance communicating the two. Scant research has directly tested this question. Second, this chapter has focused on warmth and competence judgments of individual people and groups, but perceivers also judge occupations and organizational divisions on their warmth and competence, and these judgments may affect the performance of people in those occupations and divisions. Similarly, initial evidence suggests that people stereotype organizations and industries along these same two dimensions, and that these judgments may even affect those organizations’ bottom lines.

5.1. Which is more important?

In the domains of leadership and influence, many people prioritize demonstrating their competence over demonstrating their warmth because they want to quickly prove that they are the “smartest guy in the room.” Although projecting competence is clearly important, neglecting to demonstrate trustworthiness/warmth – a psychological conduit for influence – makes it very difficult for leaders to gain loyalty and to be persuasive in a sustainable way. For example, some political experts have suggested that Democrats mistakenly overweight the importance of demonstrating their competence and knowledge, often at the expense of connecting with voters, and that this mistake is costly (e.g., think of John Kerry, Al Gore, and Hillary Clinton). John Neffinger, a noted consultant who works with politicians to help them more effectively communicate both strength and warmth, described it as follows (Cuddy & Sharma, 2010, p. 3):

While the Republicans connected with voters’ emotions, the Democrats were making the case that they had the better policies. . . Both Kerry and Gore learned oration at their respective fathers’ knees. It’s a different style, pre-Oprah. Kerry didn’t talk to voters like regular folks; he spoke directly to history—you could almost see him imagining his words chiseled in stone.

In the private sector, managers appear to mistakenly prefer “competent jerks” (i.e., competent but cold applicants) over “lovable fools” (i.e., less competent but warm applicants) in hiring decisions. In practice, it appears that the lovable fool, who brings social capital and increases cohesiveness among employees, could add more value to the organization than does that competent jerk, who may have particular skills but does not work effectively in teams or

respond well to feedback (Casciaro & Sousa-Lobo, 2005). Furthermore, in studies aiming to predict which physicians were likely to be sued for malpractice and which were not, warm behaviors (assessed via coded clips of real physician-patient interactions; Ambady et al., 2002; Levinson et al., 1997) predict fewer lawsuits, whereas measures of physician competence do not (Sloan, Mergenhagen, Burfield, Bovbjerg, & Hassan, 1989; Taragin, Wilczek, Karns, Trout, & Carson, 1992). Specifically, neither physician competence (as assessed by measures such as medical board scores and quality of medical school attended) nor the quality of medical information communicated to patients (as assessed by the actual content of recorded physician-patient conversations) predict which physicians tend to be sued (Sloan et al., 1989; Taragin et al., 1992). Rather, what *does* predict lawsuits is the extent to which physicians did or did not express warmth and concern toward their patients, through such behaviors as active listening, humor, and gentle voice tones: patients do not sue physicians they like (Ambady et al., 2002; Levinson et al., 1997).

In sum, leaders tend to see themselves as separate from their audiences, aiming to stake out a position and then try to move their audience toward them. Clearly there are advantages to feeling and seeing oneself as powerful and competent. It can be self-reinforcing – increasing confidence and willingness to take risks, for example. Also, it can signal strength and competence to others. However, initial evidence suggests that leaders must connect (i.e., demonstrate authentic warmth and trustworthiness), *then* lead (i.e., demonstrate strength and competence). We believe that, in most cases, leaders must first establish trust, demonstrate understanding, and meet the audience where they are – before they can *move* the audience. Of course, once again, this may differ based on the gender and race of the leader. For example, in the 2008 presidential campaign, the only trait that significantly predicted votes for John McCain was leadership ability, but for Obama and Hilary Clinton, both leadership ability *and* warmth mattered (see Livingston & Pearce, 2009). Accurately answering questions about the relative leadership benefits of expressing warmth versus competence will obviously require the collection of additional empirical data.

5.2. Occupations, organizational divisions, organizations, and industries

Just as groups can be mapped according to our model, so too can jobs and organizational divisions. For example, HR work may be deemed as high in warmth but low in required competence, whereas technical and engineering work may be viewed as high in competence but low in warmth. These stereotypes of occupational roles and divisions reinforce the notion that members of some groups are a better match for some jobs than for others (e.g., women are viewed as suited for HR work, but less likely to be viewed as suited to be engineers or technicians).

The model also applies at the levels of company and industry images. For example, Microsoft is viewed as competent but cold, promoting conspiracy theories about the company's "evil" intentions, whereas other companies, such as Apple, enjoy a "softer" image that resists such tarnish even when they act in arguably similar ways (e.g., Apple's attempts to monopolize the mp3 player market may not be viewed as harshly as Microsoft's "bundling" of software programs). These images may have effects ranging from recruitment (e.g., who chooses to work for Microsoft versus Apple), the success of mergers and acquisitions (how differences in basic images affect the ability of companies to merge their corporate cultures), consumer behavior (e.g., people who won't buy PCs because they view Microsoft as an "evil empire"), and even judicial decisions (e.g., deciding whether Microsoft violated anti-trust laws).

Warmth-competence stereotypes of organizations might also affect the bottom line. In a recent three-experiment paper, Aaker and colleagues (2010) applied BIAS Map predictions to stereotypes of organizations. Specifically, they compared warmth and competence stereotypes of for-profit versus non-profit firms, showing that consumers stereotyped nonprofits as more warm than competent, and for-profits as more competent than warm. Consumers were also less willing to buy a product made by a nonprofit than one that was made by a for-profit, and this effect was driven by perceptions of the firms' competence. Consumers viewed nonprofits as less competent and therefore were less likely to buy from them (i.e., lack of passive facilitation). However, when the perceived competence of a nonprofit was increased through subtle cues about the firm's credibility, discrepancies in willingness to buy vanished. In fact, consistent with the BIAS Map's predictions, when consumers perceived a firm as high on both competence and warmth, they felt admiration for the firm, which predicted their increased desire to buy a product made by that firm.

6. Concluding thoughts

Considerable empirical evidence identifies warmth and competence as universal dimensions of social judgment – across perceivers, stimuli, and cultures. Perceivers tend to evaluate individuals and groups as high or low on each

dimension, and each combination of high and low evaluations elicits a unique pattern of emotional and behavioral consequences. People judged as warm and competent elicit uniformly positive emotions and behavior: admiration, help, and association. Those judged as lacking both warmth and competence elicit uniform negativity: contempt, neglect, and attack. But ambivalent combinations – high competence with low warmth, or low competence with high warmth – are prevalent, and the resulting ambivalent affect and volatile behavior are particularly costly in organizational settings. Leaders can manage the impressions they make along these two dimensions by honing their nonverbal behaviors, although these effects are, to some extent, constrained by gender, race, and culture. Initial evidence suggests that organizations, as well as individuals and social groups, are judged along these two dimensions as well, and that these judgments can affect an organization's success, although much further research is needed in this area.

Acknowledgements

Preparation of this chapter was supported by funds from Harvard Business School. The authors would like to thank Susan Fiske, whose contributions to this area of research have been truly pathbreaking.

References

- Aaker, J., Vohs, K. D., & Mogilner, C. (2010). Nonprofits are seen as warm and for-profits as competent: Firm stereotypes matter. *Journal of Consumer Research*, *37*, 224–237.
- Abele, A. E., & Wojciszke, B. (2007). Agency and communion from the perspective of self versus others. *Journal of Personality and Social Psychology*, *93*, 751–763.
- Abelson, R. P., Kinder, D. R., Peters, M. D., & Fiske, S. T. (1982). Affective and semantic components in political person perception. *Journal of Personality and Social Psychology*, *42*, 619–630.
- Ackerman, J. M., Nocera, C. C., & Bargh, J. A. (2010). Incidental haptic sensations influence social judgments and decisions. *Science*, *328*, 1712–1715.
- Ambady, N., LaPlante, D., Nguyen, T., Rosenthal, R., Chaumeton, N., & Levinson, W. (2002). Surgeon's tone of voice: A clue to malpractice history. *Surgery*, *132*, 5–9.
- Anderson, D. J., Binder, M., & Krause, K. (2003). The motherhood wage penalty revisited: Experience, heterogeneity, work effort, and work-schedule flexibility. *Industrial and Labor Relations Review*, *56*, 273–294.
- Andreoletti, C., Maurice, J. K., & Whalen, H. (2001). Gender, race, and age: Compound stereotypes across the lifespan. Poster presented at the *Second Annual Meeting of the Society for Personality and Social Psychology*.
- Asbrock, F., & Cuddy, A. J. C. Interpersonal behavioral outcomes of warmth and competence judgments, in preparation.
- Asch, S. E. (1946). Forming impressions of personality. *Journal of Abnormal Social Psychology*, *41*, 258–290.
- Asch, S. E. (1955). Opinions and social pressure. *Scientific American*, *193*, 31–35.
- Avolio, B. J., & Barrett, G. J. (1987). Effects of age stereotyping in a simulated interview. *Psychological Aging*, *2*, 56–63.
- Bales, R. F. (1950). A set of categories for the analysis of small group interaction. *American Sociological Review*, *15*, 257–263.
- Barger, P. B., & Grandey, A. A. (2006). Service with a smile and encounter satisfaction: Emotional contagion and appraisal mechanisms. *The Academy of Management Journal*, *49*, 1229–1238.
- Bargh, J. A., & Shalev, I. (2011). The substitutability of physical and social warmth in daily life. *Emotion*, in press.
- Barnett, M. A., Quackenbush, S. W., & Pierce, S. K. (1997). Perception of and reactions to the homeless: A survey of fourth-grade, high school, and college students in a small Midwestern community. *Journal of Social Distress and the Homeless*, *6*, 238–302.
- Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, *18*, 19–31.
- Becker, J. C., & Asbrock, F. (2011). What triggers helping versus harming of ambivalent groups? Effects of the relative salience of warmth versus competence. *Journal of Experimental Social Psychology*.
- Bohns, V. K., & Wiltermuth, S. S. (2011). It hurts when I do this (or you do that): Posture and pain tolerance. *Journal of Experimental Social Psychology*.
- Bolino, M. C., & Turnley, W. H. (2003). Counternormative impression management, likeability, and performance ratings: The use of intimidation in an organizational setting. *Journal of Organizational Behavior*, *24*, 237–250.
- Brief, A. P., Dietz, J., Reizenstein Cohen, R., Pugh, S. D., & Vaslow, J. B. (2000). Just doing business: Modern racism and obedience to authority as explanations for employment discrimination. *Organizational Behavior and Human Decision Processes*, *81*, 72–97.
- Broverman, I. K., Broverman, D. M., Vogel, V., Clarkson, F. E., & Rosenkrantz, P. S. (1972). Sex-role stereotypes: A current appraisal. *Journal of Social Issues*, *28*, 59–78.
- Budig, M. J., & England, P. (2001). The wage penalty for motherhood. *American Sociological Review*, *66*, 204–225.
- Burgoon, J. K. (1991). Relational message interpretations of touch, conversational distance, and posture. *Journal of Nonverbal Behavior*, *15*, 233–259.
- Caprariello, P., Cuddy, A. J. C., & Fiske, S. T. (2009). Social structure shapes cultural stereotypes and emotions: A causal test of the stereotype content model. *Group Processes and Intergroup Relations*, *12*, 147–155.

- Carli, L. L., LaFleur, S. J., & Loeber, C. C. (1995). Nonverbal behavior, gender, and influence. *Journal of Personality and Social Psychology*, *68*, 1030–1041.
- Carney, D., Cuddy, A. J. C., & Yap, A. (2010). Power posing: Brief nonverbal displays affect neuroendocrine levels and risk tolerance. *Psychological Science*, *21*, 1363–1368.
- Carney, D. R., Hall, J. A., & LeBeau, L. S. (2005). Beliefs about the nonverbal expression of social power. *Journal of Nonverbal Behavior*, *29*, 105–123.
- Casciaro, T., & Sousa-Lobo, M. (2005). Competent jerks, lovable fools, and the formation of social networks. *Harvard Business Review*, *83*, 92–99.
- Cejka, M. A., & Eagly, A. H. (1999). Gender-stereotypic images of occupations correspond to the sex segregation of employment. *Personality and Social Psychology Bulletin*, *25*, 413–423.
- Chartrand, T. L., & Bargh, J. A. (1999). The chameleon effect: The perception-behavior link and social interaction. *Journal of Personality and Social Psychology*, *76*, 893–910.
- Chemers, M. M. (1997). *An integrative theory of leadership*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Chen, S., Shacter, D., & Chaiken, S. (1996). Getting the truth or getting along: Accuracy versus impression motivated heuristics and systematic processing. *Journal of Personality and Social Psychology*, *71*, 262–275.
- Cialdini, R. B. (1993). *Influence: Science and practice* (3rd rd.). New York: Harper Collins.
- Cialdini, R. B., Borden, R. J., Thorne, R. J., Walker, M. R., Freeman, S., & Sloan, L. R. (1976). Basking in reflected glory: Three (football) field studies. *Journal of Personality and Social Psychology*, *34*, 366–375.
- Cislak, A., & Wojciszke, B. (2008). Agency and communion are inferred from actions serving interests of self or others. *European Journal of Social Psychology*, *38*, 1103–1110.
- Correll, S. J., Benard, S., & Paik, I. (2007). Getting a job: Is there a motherhood penalty? *American Journal of Sociology*, *112*, 1297–1338.
- Crandall, C. S., Eshleman, A., & O'Brien, L. T. (2002). Social norms and the expression and suppression of prejudice: The struggle for internalization. *Journal of Personality and Social Psychology*, *82*, 359–378.
- Cuddy, A. J. C., Baily, L., Beninger, A., & Gaiher, S. (2011). He posed, she posed: Eye tracking reveals reversals in attention to men vs. women in high- vs. low-power poses. Manuscript in preparation.
- Cuddy, A. J. C., & Fiske, S. T. (2002). Doddering, but dear: Process, content, and function in stereotyping of older persons. In T. Nelson (Ed.), *Ageism: Stereotyping and prejudice against older persons* (pp. 3–26). Cambridge, MA: MIT Press.
- Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2004). When professionals become mothers, warmth doesn't cut the ice. *Journal of Social Issues*, *60*, 701–718.
- Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2007). The BIAS Map: Behaviors from intergroup affect and stereotypes. *Journal of Personality and Social Psychology*, *92*, 631–648.
- Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2008). Warmth and competence as universal dimensions of social perception: The Stereotype Content Model and the BIAS Map. In Zanna, M. P. (Ed.), *Advances in experimental social psychology*. Vol. 40 (pp.61–149). New York, NY: Academic Press.
- Cuddy, A. J. C., Fiske, S. T., Kwan, V. S. Y., Glick, P., Demoulin, S., Leyens, J. Ph ..., et al. (2009). Stereotype Content Model across cultures: Universal similarities and some differences. *British Journal of Social Psychology*, *48*, 1–33.
- Cuddy, A. J. C., Haines, E., & Frantz, C. M. (2011). The quadruple bind: Stereotypes of Black and White mothers at work and at home. Manuscript in preparation.
- Cuddy, A. J. C., Norton, M. I., & Fiske, S. T. (2005). This old stereotype: The pervasiveness and persistence of the elderly stereotype. *Journal of Social Issues*, *61*, 265–283.
- Cuddy, A. J. C., & Sharma, N. (2009, Revised 2010). Congressional Candidate Dan Silver and KNP Communications. Harvard Business School Case 910-013.
- Cuddy, A. J. C., Wilmuth, C., & Carney, D. (2011). Fake it 'til you make it: Power posing before a mock job interview boosts performance. Manuscript in preparation.
- Dardenne, B., Dumont, M., & Bollier, T. (2007). Insidious dangers of benevolent sexism: Consequences for women's performance. *Journal of Personality and Social Psychology*, *93*, 764–779.
- Dijker, A. J. (1987). Emotional reactions to ethnic minorities. *European Journal of Social Psychology*, *17*, 305–325.
- Dijker, A. J., Kok, G., & Koomen, W. (1996a). Emotional reactions to people with AIDS. *Journal of Applied Social Psychology*, *26*, 731–738.
- Dijker, A. J., Koomen, W., van den Heuvel, H., & Frijda, N. H. (1996b). Perceived antecedents of emotional reactions in inter-ethnic relations. *British Journal of Social Psychology*, *35*, 313–329.
- Dimburg, U., Thunberg, M., & Elmehed, K. (2000). Unconscious facial reactions to emotional facial expressions. *Psychological Science*, *11*, 86–89.
- Dovidio, J., Brigham, J. C., Johnson, B. T., & Gaertner, S. L. (1996). Stereotyping, prejudice, and discrimination: Another look. In C. N. Macrae, C. Stangor, & M. Hewstone (Eds.), *Stereotypes and stereotyping* (pp. 276–319). New York: Guilford.
- Eagly, A. H. (1987). *Sex differences in social behavior: A social-role interpretation*. Hillsdale, NJ: Erlbaum.
- Eagly, A. H., & Carli, L. L. (2007). *Through the labyrinth: The truth about how women become leaders*. Boston: Harvard Business School Press.
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, *109*, 573–598.
- Ekman, P., Davidson, R. J., & Friesen, W. V. (1990). The Duchenne smile: Emotional expression and brain physiology II. *Journal of Personality and Social Psychology*, *58*, 342–353.
- Erber, J. T., Etheart, M. E., & Szuchman, L. T. (1992). Age and forgetfulness: Perceivers' impressions of targets' capability. *Psychological Aging*, *7*, 479–483.
- Erber, J. T., & Fiske, S. T. (1980). Attention and weight in person perception: The impact of negative and extreme behavior. *Journal of Personality and Social Psychology*, *38*, 889–906.

- Erber, J. T., & Prager, I. G. (1999). Age and memory: Perceptions of forgetful young and older adults. In T. M. Hess & F. Blanchard-Fields (Eds.), *Social cognition and aging* (pp. 198–221). San Diego, CA: Academic Press.
- Erber, J. T., Prager, I. G., Williams, M., & Caiola, M. A. (1996). Age and forgetfulness: Confidence in ability and attribution for memory failures. *Psychological Aging, 11*, 310–315.
- Fiorina, C. (2006). *Tough choices: A memoir*. New York: Penguin Group.
- Fiske, S. T., & Cuddy, A. J. C. (2006). Stereotype content and relative group status across cultures. In S. Guimond (Ed.), *Social comparison processes and levels of analysis: Understanding culture, intergroup relations and cognition* (pp. 249–263). UK: Cambridge University Press.
- Fiske, S. T., Cuddy, A. J. C., & Glick, P. (2002a). Emotions up and down: Intergroup emotions result from perceived status and competition. In D. M. Mackie & E. R. Smith (Eds.), *From prejudice to intergroup emotions: Differentiated reactions to social groups* (pp. 247–264). Philadelphia, PA: Psychology Press.
- Fiske, S. T., Cuddy, A. J. C., & Glick, P. (2007). Universal dimensions of social cognition: Warmth, then competence. *Trends in Cognitive Sciences, 11*, 77–83.
- Fiske, S. T., Cuddy, A. J. C., Harris, L. T., & Cuddy, A. J. C. (2004). Why ordinary people torture enemy prisoners. *Science, 306*, 1482–1483.
- Fiske, S. T., Glick, P., & Xu, J. (2002b). A model of (often mixed) stereotype content: Competence and warmth respectively follow from status and competition. *Journal of Personality and Social Psychology, 82*, 878–902.
- Fiske, S. T., & Neuberg, S. L. (1990). A continuum of impression formation, from category-based to individuating processes: Influences of information and motivation on attention and interpretation. *Advances in Experimental Social Psychology, 23*, 1–74.
- Fiske, S. T., & von Hendy, H. M. (1992). Personality feedback and situational norms can control stereotyping processes. *Journal of Personality and Social Psychology, 62*, 577–596.
- Fiske, S. T., Xu, J., Cuddy, A. J. C., & Glick, P. (1999). (Dis)respecting versus (dis)liking: Status and interdependence predict ambivalent stereotypes of competence and warmth. *Journal of Sociological Issues, 55*, 473–491.
- Glick, P. (2002). Sacrificial lambs dressed in wolves' clothing: Envious prejudice, ideology, and the scapegoating of Jews. In L. S. Newman & R. Erber (Eds.), *Understanding genocide: The social psychology of the holocaust* (pp. 113–142). London: Oxford University Press.
- Glick, P. (2005). Choice of scapegoats. In J. F. Dovidio, P. Glick, & L. Rudman (Eds.), *Reflecting on the nature of prejudice* (pp. 244–261). Malden, MA: Blackwell Press.
- Glick, P., Wilk, K., & Perreault, M. (1995). Images of occupations: Components of gender and status in occupational stereotypes. *Sex Roles, 32*, 565–582.
- Goldin, C., & Rouse, C. (2000). Orchestrating impartiality: The impact of 'blind' auditions on female musicians. *American Economic Review, 90*, 715–742.
- Hall, J. A., Coats, E. J., & Smith LeBeau, L. (2005). Nonverbal behavior and the vertical dimension of social relations: A meta-analysis. *Psychological Bulletin, 131*, 898–924.
- Harris, L. T., & Fiske, S. T. (2006). Dehumanizing the lowest of the low: Neuro-imaging responses to extreme outgroups. *Psychological Science, 17*, 847–853.
- Harwood, J., Giles, H., Ota, H., Pierson, H. D., Gallois, C., Ng, S. H., et al. (1996). College students' trait ratings of three age groups around the Pacific Rim. *Journal of Cross Cultural Gerontology, 11*, 307–317.
- Heckhausen, J., Dixon, R. A., & Baltes, P. B. (1989). Gains and losses in development throughout adulthood as perceived by different adult age groups. *Developmental Psychology, 25*, 109–121.
- Heilman, M. E. (1983). Sex bias in work settings: The lack of fit model. *Research in Organizational Behavior, 5*, 269–298.
- Heilman, M. E., Wallen, A. S., Fuchs, D., & Tamkins, M. M. (2004). Penalties for success: Reactions to women who succeed at male-typed gender tasks. *Journal of Applied Psychology, 89*, 416–427.
- Ho, C., & Jackson, J. W. (2001). Attitude toward Asian Americans: Theory and measurement. *Journal of Applied Social Psychology, 31*, 1553–1581.
- Hovland, C. I., Janis, I. L., & Kelley, H. H. (1953). *Communication and persuasion: Psychological studies of opinion change*. New Haven, CT: Yale University Press.
- Huang, L., Galinsky, A. D., Gruenfeld, D. H., & Guillory, L. E. (2011). Powerful postures versus powerful roles: Which is the proximate correlate of thought and behavior? *Psychological Science, 22*, 95–102.
- Hummert, M. L., Garstka, T. A., O'Brien, L. T., Greenwald, A. G., & Mellott, D. S. (2002). Using the implicit association test to measure age differences in implicit social cognitions. *Psychological Aging, 17*, 482–495.
- Ijzerman, H., Gallucci, M., Pouw, W. T. J. L., Weissgerber, S. C., Van Doesum, N. J., Vetrova, M., et al. (2011). Cold-blooded loneliness: Social exclusion leads to lower skin temperatures. Manuscript submitted for publication.
- Ijzerman, H., & Semin, G. R. (2009). The thermometer of social relations: Mapping social proximity on temperature. *Psychological Science, 20*, 1214–1220.
- Ijzerman, H., & Semin, G. R. (2010). Temperature as a ground for social proximity. *Journal of Experimental Social Psychology, 46*, 867–873.
- Jamieson, D. W., Lydon, J. E., & Zanna, M. P. (1987). Attitude and activity preference similarity: Differential bases of interpersonal attraction for low and high self-monitors. *Journal of Personality and Social Psychology, 53*, 1052–1060.
- Janis, I. L. (1997). Groupthink. In R. P. Vecchio (Ed.), *Leadership: Understanding the dynamics of power and influence in organizations* (pp. 163–176). Notre Dame, IN: University of Notre Dame Press.
- Judd, C. M., Hawkins, L. J., Yzerbyt, V., & Kashima, Y. (2005). Fundamental dimensions of social judgment: Understanding the relations between judgments of competence and warmth. *Journal of Personality and Social Psychology, 89*, 899–913.
- Kang, Y., Williams, L. E., Clark, M., Gray, J. R., & Bargh, J. A. (2011). Physical temperature effects on trust behavior: The role of insula. *Social Cognitive and Affective Neuroscience, 6*, 507–515.
- Kao, G. (2000). Group images and possible selves among adolescents: Linking stereotypes to expectations by race and ethnicity. *Sociological Forum, 15*, 407–430.

- Katz, D., & Braly, K. (1933). Racial stereotypes of one hundred college students. *Journal of Abnormal Social Psychology*, 28, 280–290.
- Katz, I., & Hass, R. G. (1988). Racial ambivalence and American value conflict: Correlational and priming studies of dual cognitive structures. *Journal of Personality and Social Psychology*, 55, 893–905.
- Keane, T. M., Wedding, D., & Kelly, J. A. (1983). Assessing subjective responses to assertive behavior: Data from patient samples. *Behavior Modification*, 7, 317–330.
- Kenworthy, J. B., & Tausch, N. (2008). Expectations about the accuracy and stability of warmth versus competence traits: An intergroup analysis. *European Journal of Social Psychology*, 38, 1121–1129.
- Kervyn, N., Yzerbyt, V. Y., Judd, C. M., & Nunes, A. (2009). A question of compensation: The social life of the fundamental dimensions of social perception. *Journal of Personality and Social Psychology*, 96, 828–842.
- Kinder, D. R., & Sears, D. O. (1985). Public opinion and political action. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology* (3rd ed., pp. 659–741). New York: Random House.
- Kirschbaum, C., Pirke, K.-M., & Hellhammer, D. H. (1993). The ‘Trier Social Stress Test’: A tool for investigating psychological stress responses in a laboratory setting. *Neuropsychobiology*, 28, 76–81.
- Kite, M., Deaux, K., & Miele, M. (1991). Stereotypes of young and old: Does age outweigh gender? *Psychological Aging*, 6, 19–27.
- Koyano, W. (1989). Japanese attitudes toward the elderly: A review of research findings. *Journal of Cross Cultural Gerontology*, 4, 335–345.
- Kubicka-Daab, J. (1989). Positivity and negativity effects in impression formation: Differences in processing information about ability and morality dispositions. *Polish Psychological Bulletin*, 20, 295–307.
- Levinson, W., Roter, D. L., Mullooly, J. P., Dull, V., & Frankel, R. M. (1997). Physician–patient communication: The relationship with malpractice claims among primary care physicians and surgeons. *Journal of the American Medical Association*, 277, 553–559.
- Lin, M. H., Kwan, V. S. Y., Cheung, A., & Fiske, S. T. (2005). Stereotype content model explains prejudice for an envied outgroup: Scale of Anti-Asian American stereotypes. *Personality and Social Psychology Bulletin*, 31, 34–47.
- Livingston, R. W., & Pearce, N. A. (2009). The teddy-bear effect: Does having a baby face benefit Black chief executive officers? *Psychological Science*, 20, 1229–1236.
- Lord, C. G., Lepper, M. R., & Preston, E. (1984). Considering the opposite: A corrective strategy for social judgment. *Journal of Personality and Social Psychology*, 47, 1231–1243.
- Lydon, J. E., Jamieson, D. W., & Zanna, M. P. (1988). Interpersonal similarity and the social and intellectual dimensions of first impressions. *Social Cognition*, 6, 269–286.
- Maddux, W. W., Galinsky, A. D., Cuddy, A. J. C., & Polifroni, M. (2008). When being a model minority is good . . . and bad: Realistic threat explains negativity toward Asian Americans. *Personality and Social Psychology Bulletin*, 34, 74–89.
- Mascaro, O., & Sperber, D. (2009). The moral, epistemic, and mindreading components of children’s vigilance towards deception. *Cognition*, 112, 367–380.
- McCann, R. M., & Giles, H. (2002). Ageism and the workplace: A communication perspective. In T. D. Nelson (Ed.), *Ageism* (pp. 163–199). Cambridge, MA: MIT Press.
- Mehrabian, A., & Ferris, S. R. (1967). Inference of attitudes from nonverbal channels. *Journal of Consulting and Clinical Psychology*, 31, 248–257.
- Mehta, P. H., & Josephs, R. A. (2010). Testosterone and cortisol jointly regulate dominance: Evidence for a dual-hormone hypothesis. *Hormones and Behavior*, 58, 898–906.
- Milgram, S. (1974). *Obedience to authority*. New York: Harper & Row.
- Oosterhof, N. N., & Todorov, A. (2008). The functional basis of face evaluation. *Proceedings of the National Academy of Sciences*, 105, 11087–11092.
- O’Reilly, C. A., & Chatman, J. A. (1996). Culture as social control: Corporations, cults, and commitment. *Research in Organizational Behavior*, 18, 157–200.
- Parrott, W. G., & Smith, R. H. (1993). Distinguishing the experiences of envy and jealousy. *Journal of Personality and Social Psychology*, 64, 906–920.
- Peeters, G. (2001). From good and bad to can and must: Subjective necessity of acts associated with positively and negatively valued stimuli. *European Journal of Social Psychology*, 31, 125–136.
- Prentice, D. A., & Carranza, E. (2002). What women and men should be, shouldn’t be, are allowed to be, and don’t have to be: The contents of prescriptive gender stereotypes. *Psychology of Women Quarterly*, 26, 269–281.
- Reeder, G. D., Kumar, S., Hesson-McInnis, M. S., & Trafimow, D. (2002). Inferences about the morality of an aggressor: The role of perceived motive. *Journal of Personality and Social Psychology*, 83, 789–803.
- Reeder, G. D., Pryor, J. B., & Wojciszke, B. (1992). Trait–behaviour relations in social information processing. In G. Semin & K. Fiedler (Eds.), *Language and social cognition* (pp. 37–57). Beverly Hills, CA: Sage.
- Rosen, B., & Jerdee, T. H. (1976a). The nature of job-related age stereotypes on managerial decisions. *Journal of Applied Psychology*, 62, 180–183.
- Rosen, B., & Jerdee, T. H. (1976b). Influence of age stereotypes on managerial decisions. *Journal of Applied Psychology*, 61, 428–432.
- Rosenberg, S., Nelson, C., & Vivekananthan, P. S. (1968). A multidimensional approach to the structure of personality impressions. *Journal of Personality and Social Psychology*, 9, 283–294.
- Rubin, K. H., & Brown, J. (1975). A life-span look at person perception and its relationship to communicative interaction. *Journal of Gerontology*, 30, 461–468.
- Rudman, L. A., & Glick, P. (1999). Feminized management and backlash toward agentic women: The hidden costs to women of a kinder, gentler image of middle managers. *Journal of Personality and Social Psychology*, 77, 1004–1010.
- Rudman, L. A., & Glick, P. (2001). Prescriptive gender stereotypes and backlash toward agentic women. *Journal of Social Issues*, 57, 743–762.
- Rudman, L. A., & Glick, P. (2008). *The social psychology of gender: How power and intimacy shape gender relations*. New York: Guilford Press.

- Rudman, L. A., & Phelan, J. E. (2008). Backlash effects for disconfirming gender stereotypes in organizations. *Research in Organizational Behavior*, 28, 61–79.
- Rule, N. O., & Ambady, N. (2008). Brief exposures: Male sexual orientation is accurately perceived at 50 ms. *Journal of Experimental Social Psychology*, 44, 1100–1105.
- Rule, N. O., Ambady, N., Adams, R. B., Jr., Ozono, H., Nakashima, S., Yoshikawa, S., et al. (2010). Polling the face: Prediction and consensus across cultures. *Journal of Personality and Social Psychology*, 98, 1–15.
- Rush, L. L. (1998). Affective reactions to multiple social stigmas. *Journal of Social Psychology*, 138, 421–430.
- Scholer, A. A., & Higgins, E. T. (2008). Distinguishing levels of approach and avoidance: An analysis using regulatory focus theory. In A. J. Elliot (Ed.), *Handbook of approach and avoidance motivation* (pp. 489–503). New York, NY: Psychology Press.
- Scott, D. M. (1997). *Contempt and pity: Social policy and the image of the damaged Black psyche 1880–1996*. Chapel Hill, NC: University of North Carolina Press.
- Sharps, M. J., Price-Sharps, J. L., & Hanson, J. (1998). Attitudes of young adults toward older adults: Evidence from the United States and Thailand. *Educational Gerontology*, 24, 655–660.
- Singer, M. S. (1986). Age stereotypes as a function of profession. *Journal of Social Psychology*, 126, 691–692.
- Singh, R., & Teoh, J. B. P. (2000). Impression formation from intellectual and social traits: Evidence for behavioural adaptation and cognitive processing. *British Journal of Social Psychology*, 39, 537–554.
- Skowronski, J. J., & Carlston, D. E. (1987). Social judgment and social memory: The role of cue diagnosticity in negativity, positivity, and extremity biases. *Journal of Personality and Social Psychology*, 52, 689–699.
- Sloan, F. A., Mergenhagen, P. M., Burfield, W. B., Bovbjerg, R. R., & Hassan, M. (1989). Medical malpractice experience of physicians: Predictable or haphazard? *Journal of the American Medical Association*, 262, 3291–3297.
- Smith, R. H. (1991). Envy and the sense of injustice. In P. Salovey (Ed.), *The psychology of jealousy and envy* (pp. 79–99). New York: Guilford Press.
- Smith, R. H. (2000). Assimilative and contrastive emotional reactions to upward and downward social comparisons. In J. Suls & L. Wheeler (Eds.), *Handbook of social comparison: Theory and research* (pp. 173–200). New York: Kluwer Academic/Plenum Publishers.
- Smith, R. H., Parrott, W. G., Ozer, D., & Moniz, A. (1994). Subjective injustice and inferiority as predictors of hostile and depressive feelings of envy. *Personality and Social Psychology Bulletin*, 20, 705–711.
- Smith-Hanen, S. S. (1977). Effects of nonverbal behaviors on judged levels of counselor warmth and empathy. *Journal of Counseling Psychology*, 24, 87–91.
- Snyder, M., & Swann, W. B. (1978). Hypothesis-testing processes in social interaction. *Journal of Personality and Social Psychology*, 36, 1202–1212.
- Spears, R., & Leach, C. W. (2004). Intergroup schadenfreude: Conditions and consequences. In L. Z. Tiedens & C. W. Leach (Eds.), *The social life of emotions: Studies in emotion and social interaction* (pp. 336–355). New York, NY: Cambridge University Press.
- Spiegel, P., & Machotka, P. (1974). *Messages of the body*. New York: Free Press.
- Stipek, D. J., Weiner, B., & Li, K.-X. (1989). Testing some attribution–emotion relations in the People’s Republic of China. *Journal of Personality and Social Psychology*, 56, 109–116.
- Stirrat, M., & Perrett, D. I. (2010). Valid facial cues to cooperation and trust: Male facial width and trustworthiness. *Psychological Science*, 21, 349–354.
- Stogdill, R. M. (1948). Personal factors associated with leadership; A survey of the literature. *Journal of Psychology: Interdisciplinary and Applied*, 25, 35–71.
- Stogdill, R. M. (1974). *Handbook of leadership: A survey of theory and research*. New York: Free Press.
- Strack, F., Stepper, S., & Martin, L. L. (1988). Inhibiting and facilitating conditions of the human smile: A nonobtrusive test of the facial feedback hypothesis. *Journal of Personality and Social Psychology*, 54, 768–777.
- Sung, K. T. (2001). Elder respect: Exploration of ideals and forms in East Asia. *Journal of Aging Studies*, 15, 13–26.
- Surakka, V., & Hietanen, J. K. (1998). Facial and emotional reactions to Duchenne and non-Duchenne smiles. *International Journal of Psychophysiology*, 29, 23–33.
- Swaab, R., Adam, H., & Cuddy, A.J.C. (2011). Taller negotiators claim more value: An experimental test. Manuscript in preparation.
- Talaska, C. A., Fiske, S. T., & Chaiken, S. (2007). Predicting discrimination: A metaanalysis of the racial attitude-behavior literature. *Social Justice Research*, 21, 263–296.
- Taragin, M. I., Wilczek, A. P., Karns, M. E., Trout, R., & Carson, J. L. (1992). Physician demographics and the risk of medical malpractice. *American Journal of Medicine*, 93, 537–542.
- Tausch, N., Kenworthy, J., & Hewstone, M. (2007). The confirmability and disconfirmability of trait concepts revisited: Does content matter? *Journal of Personality and Social Psychology*, 92, 542–556.
- Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. In Berkowitz, L. (Ed.), *Advances in experimental social psychology*. Vol. 21 (pp.181–227). San Diego, CA: Academic Press.
- Tetlock, P. E. (1992). The impact of accountability on judgment and choice: Toward a social contingency model. In Zanna, M. P. (Ed.), *Advances in experimental social psychology*. Vol. 23 (pp.331–376). San Diego: Academic Press.
- Tiedens, L. Z., & Fragale, A. R. (2003). Power moves: Complementarity in dominant and submissive nonverbal behavior. *Journal of Personality and Social Psychology*, 84, 558–568.
- Tien-Hyatt, J. L. (1986/87). Self-perceptions of aging across cultures: Myth or reality? *International Journal of Aging Human Development*, 24, 129–148.
- Todorov, A. (2008). Evaluating faces on trustworthiness: An extension of systems for recognition of emotions signaling approach/avoidance behaviors. In: A. Kingston, & M. Miller (Eds.), *The year in cognitive neuroscience 2008, Annals of the New York Academy of Sciences*, 1124, 208–224.

- Todorov, A., Mandisodza, A. N., Goren, A., & Hall, C. C. (2005). Inferences of competence from faces predict election outcomes. *Science*, *308*, 1623–1626.
- Todorov, A., Said, C. P., Engell, A. D., & Oosterhof, N. N. (2008). Understanding evaluation of faces on social dimensions. *Trends in Cognitive Sciences*, *12*, 455–460.
- Vescio, T. K., Gervais, S. J., Snyder, M., & Hoover, A. (2005). Power and the creation of patronizing environments: The stereotype-based behaviors of the powerful and their effects on female performance in masculine domains. *Journal of Personality and Social Psychology*, *88*, 658–672.
- Wang, J., & Cuddy, A. J. C. (2010). Perceived trait transitivity across social networks: “Competent” and “cold” travel, but “incompetent” and “warm” go nowhere, unpublished manuscript.
- Weiner, B. (1980). A cognitive (attribution)-emotion-action model of motivated behavior: An analysis of judgments of help-giving. *Journal of Personality and Social Psychology*, *39*, 186–200.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, *92*, 548–573.
- Weiner, B. (2005). *Social motivation, justice, and the moral emotions: An attributional approach*. Mahwah, NJ: Lawrence Erlbaum.
- Weiner, B., Graham, S., & Chandler, C. (1982). Pity, anger, and guilt: An attributional analysis. *Personality and Social Psychology Bulletin*, *8*, 226–232.
- Weiner, B., Perry, R. P., & Magnusson, J. (1988). An attributional analysis of reactions to stigmas. *Personality and Social Psychology Bulletin*, *55*, 738–748.
- Weisfeld, G. E., & Beresford, J. M. (1982). Erectness of posture as an indicator of dominance or success in humans. *Motivation and Emotion*, *6*, 113–131.
- Williams, L. E., & Bargh, J. A. (2008). Experiencing physical warmth promotes interpersonal warmth. *Science*, *322*, 606–607.
- Willis, J., & Todorov, A. (2006). First impressions: Making up your mind after a 100-Ms exposure to a face. *Psychological Science*, *17*, 592–598.
- Wojciszke, B. (1994). Multiple meanings of behavior: Construing actions in terms of competence or morality. *Journal of Personality and Social Psychology*, *67*, 222–232.
- Wojciszke, B. (2005a). Affective concomitants of information on morality and competence. *European Psychologists*, *10*, 60–70.
- Wojciszke, B. (2005b). Morality and competence in person and self perception. *European Review of Social Psychology*, *16*, 155–188.
- Wojciszke, B., & Abele, A. E. (2008). The primacy of communion over agency and its reversals in evaluations. *European Journal of Social Psychology*, *38*, 1139–1147.
- Wojciszke, B., Abele, A. E., & Baryla, W. (2007). Two dimensions of interpersonal attitudes: Liking depends on communion, respect depends on agency. *European Journal of Social Psychology*, *39*, 973–990.
- Wojciszke, B., Bazinska, R., & Jaworski, M. (1998a). On the dominance of moral categories in impression formation. *Personality and Social Psychology Bulletin*, *24*, 1245–1257.
- Wojciszke, B., Dowhyluk, M., & Jaworski, M. (1998b). Moral competence-related traits: How do they differ? *Polish Psychological Bulletin*, *29*, 283–294.
- Wojciszke, B., & Klusek, B. (1996). Moral and competence-related traits in political perception. *Polish Psychological Bulletin*, *27*, 319–324.
- Word, C. O., Zanna, M. P., & Cooper, J. (1974). The nonverbal mediation of self-fulfilling prophecies in interracial interactions. *Journal of Experimental Social Psychology*, *10*, 109–120.
- Ybarra, O., Chan, E., & Park, D. (2001). Young and old adults’ concerns about morality and competence. *Motivation & Emotion*, *25*, 85–100.
- Ybarra, O., Chan, E., Park, H., Burnstein, E., Monin, B., & Stanik, C. (2008). Life’s recurring challenges and the fundamental dimensions: An integration and its implications for cultural differences and similarities. *European Journal of Social Psychology*, *38*, 1083–1092.
- Ybarra, O., & Stephan, W. G. (1999). Attributional orientations and the prediction of behavior: The attribution-prediction bias. *Journal of Personality and Social Psychology*, *76*, 718–727.
- Yee, A. H. (1992). Asians as stereotypes and students: Misperceptions that persist. *Educational Psychology Review*, *4*, 95–132.
- Zebrowitz, L. A. (1997). *Window to the soul? New directions in social psychology*. Boulder, CO: Westview Press.
- Zebrowitz, L. A., & Montepare, J. M. (2005). Appearance DOES matter. *Science*, *308*, 1565–1566.
- Zhong, C.-B., & Leonardelli, G. J. (2008). Cold and lonely: Does social exclusion literally feel cold? *Psychological Science*, *19*, 838–842.
- Zucker, G. S., & Weiner, B. (1993). Conservatism and perceptions of poverty: An attributional analysis. *Journal of Applied Social Psychology*, *23*, 925–943.