

# WARMTH AND COMPETENCE AS UNIVERSAL DIMENSIONS OF SOCIAL PERCEPTION: THE STEREOTYPE CONTENT MODEL AND THE BIAS MAP

Amy J. C. Cuddy,\* Susan T. Fiske,† and Peter Glick‡

## Contents

1. Introduction	62
1.1. Defining warmth and competence	65
1.2. The stereotype content model and the BIAS map	66
2. Warmth and Competence as Fundamental Dimensions of Social Perception	71
2.1. Interpersonal perception	71
2.2. Intergroup perception	74
2.3. Primacy of warmth	89
3. Social Structural Roots of Warmth and Competence Judgments	93
3.1. Why social status should predict competence judgments	94
3.2. Why competition should predict warmth judgments	95
3.3. US tests of SCM structural hypotheses	96
3.4. Cross-cultural tests of SCM structural hypotheses	99
3.5. Converging theory and evidence	101
4. Emotional, Behavioral, and Attributional Consequences	102
4.1. Prejudiced emotions: Admiration, contempt, envy, and pity	102
4.2. Behaviors: Active and passive, facilitation and harm	108
5. Spotlight on Ambivalent Combinations: Warm-Incompetent and Competent-Cold	119
5.1. Pitying prejudice: Warm but incompetent	120
5.2. Envious prejudice: Competent but cold	125
6. Current and Future Directions and Summary	130
6.1. Current and future directions	130
6.2. Summary	137

\* Kellogg School of Management, Northwestern University, Evanston, IL 60208

† Department of Psychology, Princeton University, Princeton, NJ 08540

‡ Department of Psychology, Lawrence University, Appleton, WI 54912

Acknowledgments	137
References	138

## Abstract

The stereotype content model (SCM) defines two fundamental dimensions of social perception, *warmth* and *competence*, predicted respectively by perceived competition and status. Combinations of warmth and competence generate distinct emotions of admiration, envy, pity, and disgust. From these intergroup emotions and stereotypes, the behavior from intergroup affect and stereotypes (BIAS) map predicts distinct behaviors: active and passive, facilitative and harmful. After defining warmth/communion and competence/agency, the chapter integrates converging work documenting the centrality of these dimensions in interpersonal as well as intergroup perception. Structural origins of warmth and competence perceptions result from competitors judged as not warm, and allies judged as warm; high status confers competence and low status incompetence. Warmth and competence judgments support systematic patterns of cognitive, emotional, and behavioral reactions, including ambivalent prejudices. Past views of prejudice as a univalent antipathy have obscured the unique responses toward groups stereotyped as competent but not warm or warm but not competent. Finally, the chapter addresses unresolved issues and future research directions.

## 1. INTRODUCTION

Sit in any airport, train station, or bus depot, then watch and listen. The sheer ethnic variety reflected in the visual and aural parade staggers the mind. This variety requires adjustments on all sides, as the world's peoples encounter each other. The circumstances of migration generate particular images of distinct groups, which in turn create distinct feelings and impulses. Mapping this new geography of intergroup and interpersonal contact is the business of this chapter. Migration and ethnic stereotypes are not new, of course, but the circumstances of ethnic groups shift with history, and with these structural changes come changes in patterns of stereotypes, prejudices, and discrimination. For example, ethnic Chinese who migrated to the United States in the mid-19th century to help build railroads were seen as animal laborers, neither especially competent nor especially trustworthy. After they were expelled and new Chinese migrants appeared in the 20th century, stereotypes changed accordingly to reflect entrepreneurs and technical experts, who are viewed now as perhaps excessively competent, but still not warm.

As a result of modern globalization, encounters among people from different social categories are increasingly common. What is more, as the number and range of social categories in society has increased, so has

the gap between groups at the top and the bottom, creating further categorical divides. This increase is especially dramatic in the United States (Massey, 2007). North American prejudice researchers have long focused on Black–White intergroup relations, but this model does not apply to all the varieties of differences that people encounter daily, on personal and societal levels. People’s ordinary lives require forming efficient and effective impressions of incredible numbers of other individuals. In examining how people make sense of each other, both as individuals and as group members, we have discovered two dimensions that differentiate groups and individuals. These dimensions appear to be both fundamental and universal, as we will argue here.

This chapter presents a framework synthesizing research on perceptions of individuals and groups. The core of this synthesis is the observation that judgments of warmth and competence underlie perceptions of others, driving perceivers’ emotional and behavioral reactions, all resulting from social structural relationships. We argue that these dimensions are universal because they assess questions about others that are both basic and adaptive. Further, we show how judgments of warmth and competence follow from the structure of relations between individuals or between groups: specifically, their form of interdependence (cooperative vs competitive) and status relations. These insights are framed in terms of the stereotype content model (SCM; Fiske *et al.*, 2002b) and a recent extension of this theory, the behavior from intergroup affect and stereotypes (BIAS) map (Cuddy *et al.*, 2007). Although both the SCM and BIAS map are oriented toward explaining intergroup relations, we show here how they extend to interpersonal relations.

The functional significance and universality of the warmth and competence dimensions result from their correspondence to two critical questions basic to surviving and thriving in a social world. First, actors need to anticipate others’ intentions toward them; the warmth dimension—comprising such traits as morality, trustworthiness, sincerity, kindness, and friendliness—assesses the other’s perceived intent in the social context. Second, both in importance and temporal sequence, actors need to know others’ capability to pursue their intentions; the competence dimension—comprising such traits as efficacy, skill, creativity, confidence, and intelligence—relates to perceived capability to enact intent. Motivationally, warmth represents an accommodating orientation that profits others more than the self, whereas competence represents self-profitable traits related to the ability to bring about desired events (Peeters, 1983). In short, actors distinguish individuals and groups according to their likely impact on the self or ingroup as determined by perceived intentions and capabilities.

Warmth and competence dimensions have consistently emerged in both classic and contemporary studies of person perception (Asch, 1946; Rosenberg *et al.*, 1968; Wojciszke *et al.*, 1998), social-value orientations

(e.g., self- and other-profitability; Peeters, 2002), construals of others' behaviors (Wojciszke, 1994), and voters' ratings of political candidates in the United States (Abelson *et al.*, 1982; Kinder and Sears, 1981) and Poland (Wojciszke and Klusek, 1996). Although often under the guise of different labels, which we review below, the warmth and competence dimensions also describe national stereotypes (e.g., morality and competence, Alexander *et al.*, 1999; Phalet and Poppe, 1997; Poppe, 2001; Poppe and Linssen, 1999), characterize the four poles of Wiggins's interpersonal circumplex of behaviors (i.e., agreeableness and extroversion; Wiggins, 1979), and surface in numerous in-depth analyses of prejudices toward specific social groups (e.g., Clausell and Fiske, 2005; Eckes, 2002; Glick, 2002; Glick and Fiske, 1996; Hurh and Kim, 1989; Kitano and Sue, 1973; Lin *et al.*, 2005; Spence and Helmreich, 1979; cf., Altermatt *et al.*, 2003).

More recently, work on the SCM and the BIAS map has documented the centrality of warmth and competence as dimensions of group stereotypes, identified their origins in social structural relations, and delineated their emotional and behavioral consequences. By integrating the SCM and BIAS map with other relevant theory and research from interpersonal and intergroup perception, we hope to achieve three overarching goals in this chapter: (1) to show the centrality of warmth and competence as dimensions of social judgment across varied targets (both individuals and groups), perceivers, and cultures; (2) to locate the origins of warmth and competence judgments in social structural variables; and (3) to assess the emotional and behavioral consequences of warmth and competence judgments. Throughout the chapter, we review our research on this topic, including more than three dozen correlational and experimental studies from seventeen nations. Ultimately, we aim not only to present an integrative review of the overwhelming evidence of the universality of these two dimensions in social perception, but also to provide a common framework for identifying the origins and predicting the social consequences of warmth and competence judgments.

We organize this chapter into the following sections. First, we address definitional issues and provide a brief background and summary of the SCM and the BIAS map. Second, we review and integrate converging theory and evidence documenting the centrality of warmth and competence dimensions in interpersonal as well as intergroup perception, including our own research, which has provided extensive evidence of their significance in intergroup relations (Cuddy *et al.*, 2007, in press; Fiske *et al.*, 1999, 2002b, 2007; Glick and Fiske, 2001b). Third, we turn to a discussion of the structural origins of warmth and competence perceptions. We propose that people viewed as competitors are judged as lacking warmth, whereas people viewed as allies are judged as warm; people viewed as high status are judged as competent, whereas people viewed as low status are judged as incompetent. Fourth, we examine the social outcomes of warmth and

competence judgments, proposing and reviewing empirical support for the existence of systematic patterns of cognitive, emotional, and behavioral reactions to perceiving others as competent versus incompetent, and warm versus cold. In the fifth section, we discuss ambivalent patterns of prejudice in greater detail. Built upon the paradigm of prejudice as a univalent antipathy, past research has obscured the unique patterns of social responses toward groups that are stereotyped as competent but not warm or as warm but not competent. In the sixth and final section, we summarize and discuss unresolved issues and future research directions.

### 1.1. Defining warmth and competence

Many different labels describe what boil down to virtually the same two dimensions. Our warmth scales have included good-natured, trustworthy, tolerant, friendly, and sincere. Our competence scales have included capable, skillful, intelligent, and confident. Wojciszke *et al.*'s (1998) terms are morality and competence, but the moral traits include *fair, generous, helpful, honest, righteous, sincere, tolerant, and understanding*, which overlap entirely with the warmth-trustworthiness dimension identified elsewhere. (There is no dispute about the competence label, but those traits include *clever, competent, creative, efficient, foresighted, ingenious, intelligent, and knowledgeable*.) Peeters's (1983, 2002) distinction between self-profitable traits—those that directly benefit or harm the trait possessor (e.g., intelligence, inefficiency)—versus other-profitable traits—those that directly benefit or harm others in the trait possessor's social world (e.g., trustworthy, hostile)—set the precedent for Wojciszke's work and essentially agrees with our usage of competence and warmth.

Slightly different but still compatible are the communion and agency dimensions originated in personality psychology by Bakan (1956) who noted, in a philosophical context, two fundamental modalities in the existence of living beings, agency for the existence of the organism as an individual, and communion of the individual with belonging to some larger organism. The gender literature picked up this distinction because the dimensions related respectively to femininity and masculinity (Abele, 2003; Carlson, 1971; Spence *et al.*, 1979; White, 1979). Communion and agency since have been frequently linked to gender stereotypes (e.g., Eagly and Steffen, 1984), social motives (e.g., McAdams *et al.*, 1984), sex differences (Buss, 1981), and more (see Rudman and Glick, 2008, for a review). Although acknowledging the important gendered flavor of these two dimensions, and their relations to warmth and competence, we go beyond gender in the SCM. What's more, whereas communion closely resembles our warmth dimension, agency does not fully capture competence, because agency focuses more on taking effective action. Competence entails the possession of skills, talents, and capability, but it can take the form of

potential action as well as actual action, so we prefer to emphasize competence rather than agency. We use the terms *warmth* and *competence* for simplicity, but we view them as closely related to *communion* and *agency*.

To demonstrate the high redundancy across these variously named dimensions, Abele and Wojciszke (2007) asked participants to rate a list of 300 trait terms, which were selected to represent all of the above-named dimensions in addition to the collectivism/individualism and the Big Five, on the related constructs of agency/communion, morality/competence, collectivism/individualism, and femininity/masculinity. They found that a two factor-solution, with one factor comprising the traits representing agency, individualism, masculinity, and competence and the other dimension comprising the traits representing communion, collectivism, femininity, and morality, accounted for almost 90% of the variance. Participants in the same study also rated these traits on the extent to which they reflected self-interest (i.e., does possessing the trait benefit or harm the self) or other-interest (i.e., does possessing the trait benefit or harm others). As expected, ratings of other-interest positively correlated with morality and ratings of self-interest positively correlated with agency (Abele and Wojciszke, 2007).

Finally, Osgood *et al.*'s semantic differential (1957) defined dimensions that might seem similar to warmth and competence. They identified evaluation, potency, and activity (EPA) as central dimensions of language and attitudes. Commentators have often wondered whether evaluation corresponds to warmth and potency to competence. Our answer is no, not exactly. First, both warmth and competence have evaluative components; it is better to be warm, trustworthy, and helpful than not. Similarly, it is better to be competent and skilled than not. Second, both warmth and competence can be more or less potent as well: one can be strong and warm or weak and warm, and the same for competence. Third, as for activity, it collapses with potency into a single factor, called "dynamism," at least in person perception (Osgood *et al.*, 1957). Fourth, recent data comparing the evaluation, potency, and agency (EPA) dimensions and the SCM show that they are not redundant (Capozza *et al.*, 2007). Overall, we would suggest that the evaluation x potency/activity space probably operates at a 45° rotation to our space. We return to this point in our discussion of future directions (section 6.1).

## 1.2. The stereotype content model and the BIAS map

### 1.2.1. Guiding principles of intergroup BIAS

The SCM and the BIAS map integrate several interrelated broad principles of intergroup bias, derived from work on its functional, motivational, and social-cognitive roots. The first principle is that *many groups do not receive a one-dimensional, hostile type of prejudice*. Recent work by us and others converges on the view that prejudice is both group- and context-dependent and can simultaneously include both negative and subjectively positive

responses. For example, according to Cottrell and Neuberg's (2005) sociofunctional approach, different groups (e.g., gay men versus Mexican-Americans) elicit distinct classes of perceived threats (e.g., to health versus property, respectively), which evoke functionally relevant, distinct emotion profiles (e.g., disgust and pity versus fear and anger, respectively; see also Esses *et al.*, 2001; Stephan and Renfro, 2002). On the basis of intergroup biases, Alexander and colleagues proposed a functional model called Image Theory (1999, 2005; Brewer and Alexander, 2002), which asserts that actors make three appraisals of outgroups: intergroup goal compatibility, relative status, and power to attain goals. For each outgroup, these appraisals (e.g., incompatible goals, equal status, equal power) induce specific action tendencies (attack) and emotions (anger), generating distinct outgroup "images" (e.g., hostile, opportunistic enemy). Like our model, these other approaches also suggest that the contents of biases vary across groups and situations in ways that cannot be explained by a view of prejudice as an undifferentiated antipathy (Esses *et al.*, 2001; Mackie *et al.*, 2000; Stephan and Stephan, 2000).

Second, the *contents of the three psychological components of bias—cognitions (stereotypes), affect (emotional prejudices), and behavior (discrimination)—operate in synchrony with one another*, an idea that is firmly grounded, for example, in appraisal theories of emotion (Frijda, 1986; Roseman, 1984; Scherer, 1988; Smith and Ellsworth, 1985). Lazarus and Folkman (1984) define cognitive appraisals as assessments of the implications of the others' behavior for the self (or ingroup). Situations and their corresponding cognitive appraisals elicit discrete patterns of emotions, which in turn trigger specific behavioral responses (e.g., offensive action) adapted to cope with the potential threat the other individual or group poses (Frijda *et al.*, 1989; Izard, 1991; Izard *et al.*, 1993; Roseman *et al.*, 1994) view that is even supported by evidence of neuroanatomical emotion pathways linked to specific behaviors (Panksepp, 2000). For example, according to intergroup emotions theory (IET), an appraisal-based approach to intergroup relations, appraising the ingroup as stronger than a hostile outgroup elicits anger, which leads to offensive action tendencies, whereas appraising the outgroup as stronger results in fear (Mackie *et al.*, 2000). These patterns of relationships have been documented at both the interpersonal and intergroup levels (Devos *et al.*, 2002; Dijkster, 1987; Dijkster *et al.*, 1996b; Mackie and Smith, 1998; Mackie *et al.*, 2000; cf. Fiske *et al.*, 2002b). Attitude theories also posit that the affective, cognitive, and behavioral correlates of evaluation tend to converge, depending on circumstances (e.g., Ajzen, 2001).

Third, *emotions mediate the effects of cognitions on discrimination*. Emotions can be viewed as the engines that drive behavior (Tomkins, as cited in Zajonc, 1998) and "changes in action readiness" (Zajonc, 1998, p. 466). Affect often mediates the effects of cognition on behavior, which is a central tenet of appraisal theories of emotion, including IET, which propose a

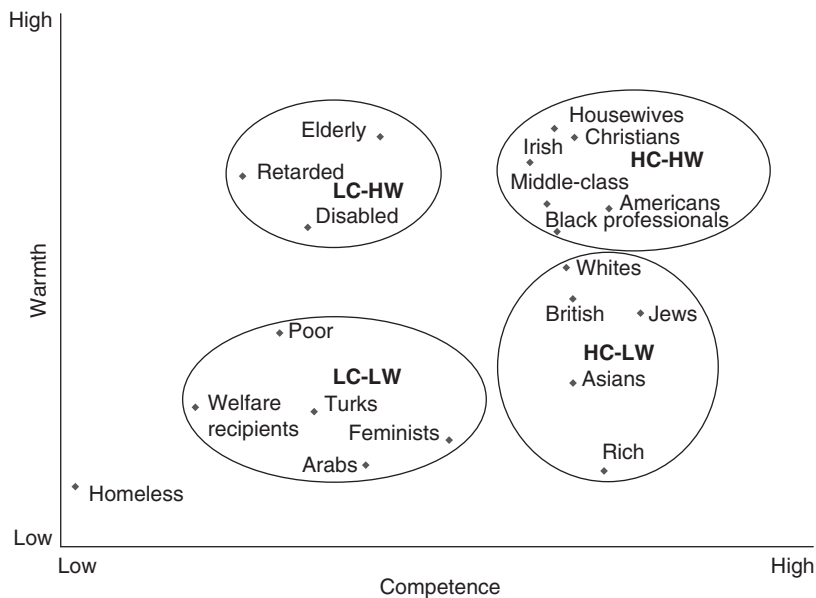
cognitive appraisal → emotion → behavior sequence (Frijda *et al.*, 1989; Mackie *et al.*, 2000; Roseman *et al.*, 1994). Because of this more direct link to behavior, past research suggests that affect often predicts discriminatory behavior better than stereotypes (Dovidio *et al.*, 1996, 2002; Esses and Dovidio, 2002; Esses *et al.*, 1993; Schütz and Six, 1996; Stangor *et al.*, 1991; Talaska *et al.*, 2007). Although we agree that emotions mediate the effects of cognitions (including stereotyped beliefs) on behavior, our theoretical perspective and findings suggest that past research has underestimated the effects of cognition by failing to appreciate how the content of stereotypes on warmth and competence dimensions together create distinct patterns of bias (cognitively, emotionally, and behaviorally).

### 1.2.2. Basic tenets of the SCM

**1.2.2.1. Centrality of warmth and competence** The SCM's first tenet is that perceived warmth and competence underlie and differentiate group stereotypes. Although specific group stereotypes have some idiosyncratic content (e.g., the notion that Black people are "rhythmic"), underlying such beliefs are more general themes organized along warmth and competence dimensions. Although we do not discount the importance of specific, historically conditioned beliefs about groups, we suggest that much of the variance in stereotypes of groups is accounted for by the more basic warmth and competence dimensions. As we review in detail below, our research consistently reveals differentiated clusters of high versus low warmth and competence stereotypes across widely varied target groups, such as occupations, nationalities, ethnicities, socioeconomic groups, religions, and gender subgroups. Moreover, these patterns appear to be (a) universal features of social perception, supported in diverse US samples (Fiske *et al.*, 2002b, 1999), including a representative national sample (Cuddy *et al.*, 2007), and in 17 other nations (Cuddy *et al.*, in press) and (b) predicted by the structural relations between groups (Cuddy *et al.*, 2007, in press; Fiske and Cuddy, 2006; Fiske *et al.*, 1999, 2002b).

**1.2.2.2. Ambivalent stereotypes** The SCM posits that many groups will receive ambivalent stereotypes, comprising a positive evaluation on one dimension and a negative evaluation on the other. In other words, many outgroups are viewed as competent but not warm (e.g., Asians, Jews, the rich), or as warm but not competent (e.g., the disabled, the elderly, housewives). Importantly, subjectively positive stereotypes on one dimension typically do not contradict prejudice or reduce discrimination but reinforce unflattering stereotypes on the other dimension and justify unequal treatment. Although some groups (homeless, poor, welfare recipients) are stereotyped as low on both warmth and competence, only reference groups—ingroups (e.g., students) and societal prototype groups (e.g., Whites, middle-class)—are perceived to be both warm and competent (at least in Western cultures;





**Figure 2.1** Stereotype content model warmth  $\times$  competence space mapping social groups, in a representative sample survey of American adults. *Source:* Cuddy *et al.* (2007). Reproduced by permission.

Cuddy *et al.*, in press). (See Fig. 2.1 for the relative locations of various groups.)

### 1.2.2.3. Social structural origins of perceived warmth and competence

According to the SCM, the origins of perceived warmth and competence lie in social structural variables, namely competition and status, such that non-competitive others are judged to be warm, whereas competitive others are not; and high-status others are judged to be competent, whereas low-status others are not. These relationships have been replicated in virtually all of the studies of actual groups cited above (Cuddy *et al.*, 2007, in press; Fiske *et al.* 1999, 2002b). Further, the same principles hold for experimentally constructed groups (Caprariello *et al.*, 2007; Oldmeadow and Fiske, in press) and in perceptions of individuals (Russell and Fiske, 2007), which we discuss in more detail below.

### 1.2.2.4. Warmth and competence judgments elicit signature emotions

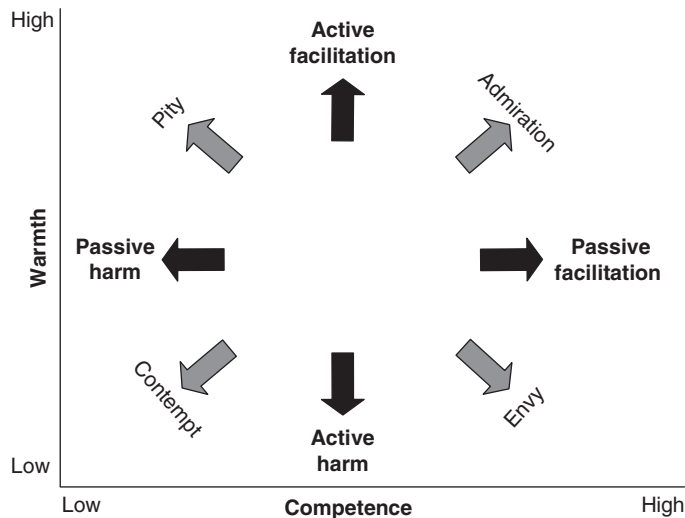
The SCM proposes that the four combinations of high versus low warmth and competence judgments elicit four unique emotional responses: admiration, contempt, envy, and pity (Fiske *et al.*, 2002a,b). Specifically, groups stereotyped as warm and competent (e.g., ingroups)—elicit admiration.

Groups stereotyped as incompetent and cold (e.g., homeless people) elicit contempt. Groups stereotyped as competent but not warm (e.g., Asians) elicit envy. Groups stereotyped as warm but not competent (e.g., elderly people) elicit pity. These proposals have been supported using both correlational and experimental methods, as well as cross-cultural comparisons (Cuddy *et al.*, 2004, in press; Fiske *et al.*, 2002a,b). We discuss the theoretical underpinnings of these relationships later.

### 1.2.3. Basic tenets of the BIAS map

The BIAS map (Cuddy *et al.*, 2007; Fig. 2.2) extends the SCM by considering the behavioral outcomes of warmth and competence evaluations in social interactions. It proposes that the four combinations of high versus low warmth and competence 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).

**1.2.3.1. Warmth and competence judgments elicit active and passive behaviors** Because the warmth dimension is primary (due to its perceived link to others' intentions), perceived warmth predicts active behaviors: groups judged as warm elicit active facilitation (i.e., help), whereas those judged as lacking warmth elicit active harm (i.e., attack). The competence dimension, being secondary because it assesses others' capability to carry out intentions), predicts passive behaviors: groups judged as competent elicit



**Figure 2.2** Stereotype content model predictions for emotions and BIAS map predictions for behaviors in the warmth by competence space. *Source:* Cuddy *et al.* (2007). Reproduced by permission.

passive facilitation (i.e., obligatory association, convenient cooperation), whereas those judged as lacking competence elicit passive harm (i.e., neglect, ignoring). In short, distinct types of discrimination follow each warmth-by-competence combination.

**1.2.3.2. Discrete emotions elicit specific behavior patterns** The BIAS map also connects the four kinds of emotions—corresponding to the four warmth–competence combinations—to predicted behaviors. Specifically, admired (i.e., competent and warm) groups elicit both active and passive facilitation, that is, both helping and associating. Resented, envied (i.e., incompetent and cold) groups elicit both kinds of harm: active attack and passive neglect.

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 overhelped and other times neglected. Being institutionalized also can combine active help and passive neglect. In contrast, envied groups elicit both passive association and active harm. For instance people may shop at the stores of entrepreneurial outsiders, going-along-to-get-along, but under societal breakdown may attack and loot these same shops. Koreans in Los Angeles, Tutsis in Rwanda, Chinese in Indonesia, and Jews in Europe have each experienced such treatment.

Consistent with appraisal theories of emotion, the BIAS map predicts that emotions are the proximal cause of social behaviors, a finding reflected in meta-analyses of emotional prejudices and cognitive stereotypes as predictors of discrimination (Dovidio *et al.*, 1996; Talaska *et al.*, 2007). The BIAS map predicts that emotions more strongly and directly predict behaviors because they mediate the link from warmth and competence judgments to behaviors. We later present both correlational and experimental support for these patterns at both the intergroup (e.g., Cuddy *et al.*, 2004, 2007) and interpersonal levels (Asbrock and Cuddy, 2008; Talaska *et al.*, 2007).



## **2. WARMTH AND COMPETENCE AS FUNDAMENTAL DIMENSIONS OF SOCIAL PERCEPTION**

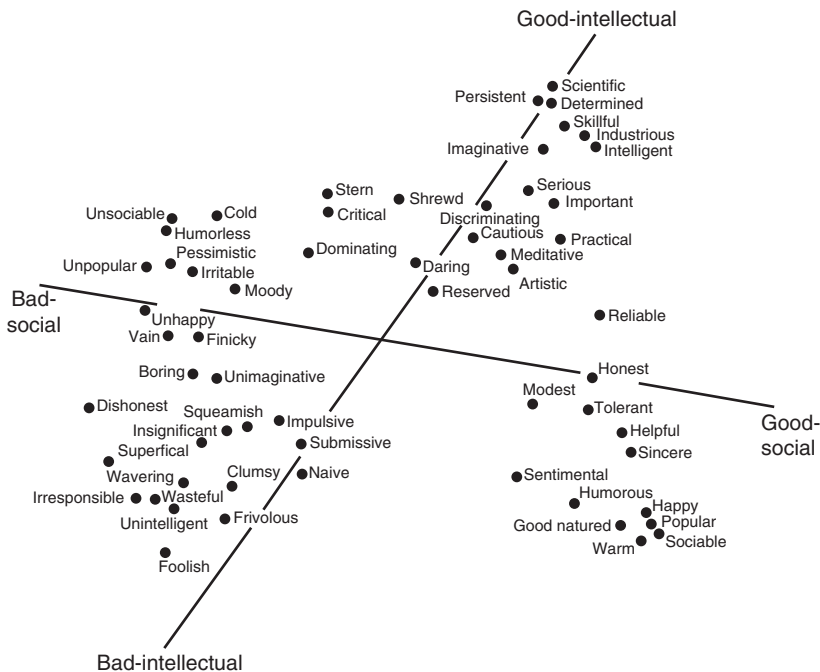
### **2.1. Interpersonal perception**

#### **2.1.1. Centrality of warmth and competence**

The centrality of warmth and competence is well documented in the area of interpersonal perception, going back over half a century. Perhaps the first empirical suggestion of the importance of these two dimensions came from Asch's (1946) classic studies, in which the inclusion of the trait “warm” versus “cold” shaped people's “Gestalt impressions” of a person described by a list of competence-related characteristics. When the target person

described as competent and capable was also described as “warm,” participants perceived him as wise. If the same competent, capable person was instead described as “cold,” participants perceived him as sly.

Although Asch’s work intuited the centrality of these two dimensions, extensions of his work more clearly demonstrated their centrality. Rosenberg *et al.* (1968) asked participants to sort 64 traits into categories that were likely to be found in an individual person. Multidimensional scaling of the results pointed to two nearly orthogonal dimensions as best representing the general trait structure of person judgments. *Intellectual good/bad*, akin to competence, included such traits as determined, skillful, industrious, intelligent, and scientific; *social good/bad*, akin to warmth, included such traits as warm, honest, helpful, good-natured, sincere, and tolerant. As Fig. 2.3 illustrates, Asch’s results could be explained as a result of varying the social good/bad dimension, while holding constant the intellectual good/bad description. The power of the warm–cold manipulation to alter a Gestalt impression of an individual was that it tapped a



**Figure 2.3** Trait adjectives in a multidimensional scaling solution of social (warmth) and intellectual (competence) dimensions. *Source:* Rosenberg *et al.* (1968). Reproduced by permission.

separate and primary fundamental dimension of person perception (see also Hamilton and Zanna, 1974; Zanna and Hamilton, 1972, 1977).

Nevertheless, the implications of these basic dimensions of person perception had not yet reached total consensus. Additionally, calling trait lists “person perception” was empirically tractable but ecologically problematic. Some studies (e.g., Chemers, 1997; Fiske, 1980) addressed ecological validity by providing pictures of stimulus persons engaged in personality-revealing behaviors on two cognate dimensions, such as sociability and responsibility. But these laboratory studies still entailed experimenter-chosen traits, capitalizing on the apparent distinction between the two dimensions, but begging the question of perceivers’ spontaneously used dimensions.

Related social (warmth) and task (competence) orientations also describe interactions in small groups (Bales, 1950). Bales coded interactions in generations of a self-observational small group class at Harvard, in addition to interacting small groups in a variety of organizations; all evidence converged on these two dimensions (Bales, 1999). Bales also included a third dimension in his system, which amounted to the sheer volume of interaction, probably most salient in the live interaction context, but less salient in stored impressions.

As noted earlier, Peeters (1983, 1992, 1995) has argued for the dimensions of self-profitability (e.g., confident, ambitious, practical, intelligent)—akin to competence—and other-profitability (e.g., conciliatory, tolerant, trustworthy)—akin to warmth. The Peeters distinction has been applied to evaluations of social behavior (Vonk, 1999). In particular, positive and negative behaviors were judged more extremely when they had consequences for others than when they had consequences only for the self. Normally, other-consequential behaviors fall on the warmth dimensions, but this experiment fully crossed warmth/competence and self/other consequences, finding that interpersonal consequences mattered the most. Similarly, dislikeable and strong behavior (roughly, low warmth, and high competence) each amplify the other, showing again that consequences for others are most salient in interpersonal judgments (Vonk, 1996). We return to this point below (section 2.3).

Wojciszke and colleagues’ extensive experimental work on the two dimensions continues to build a strong case for their importance. Together, these two dimensions account for ~82% of the variance in global impressions of well-known others (Wojciszke *et al.*, 1998). Three-quarters of over 1000 personally experienced past events are framed in terms of either morality or competence (Wojciszke, 1994), and impressions of work supervisors show a similar pattern (Wojciszke *et al.*, 2007). In sum, when people spontaneously interpret behavior or their impressions of others, warmth and competence form basic dimensions that, by themselves, almost entirely account for how people characterize others. (For a review, see Wojciszke, 2005a,b.)

The warmth–competence dimensions also emerge on voters’ evaluations of political candidates (Abelson, 1982; Kinder and Sears, 1985; Todorov *et al.*, 2005; Wojciszke and Klusek, 1996), as types of leadership styles (relation- and task-oriented; Chemers, 2001), as dimensions of interpersonal attraction (Jamieson *et al.* 1987, Lydon *et al.*, 1988), as determinants of social network development (Casciaro and Sousa-Lobo, 2005), among others. These dimensions appear in, for example, spontaneous impressions of presidential candidates, which entail both competence and integrity (warmth and trustworthiness) (Abelson *et al.*, 1982; Kinder *et al.*, 1980; Wojciszke and Klusek, 1996). Impressions of leaders more generally involve these dimensions, with image management (building trust), relationship development (warmth), and resource deployment (competence and efficacy) (Chemers, 1997); although one could quibble over separating or combining trust and warmth, the core difference between the task and social domain consistently appears.

In perception of others, the dimensions are negatively correlated in most cases (Judd *et al.*, 2005). This negative correlation leads to a high representation of others in the mixed combinations, high on one dimension and low on the other, as the SCM predicts in the intergroup domain. Judd and colleagues suggest this negative correlation is especially likely when judging people, groups, or cultures about which norms may discourage uniform disparagement, especially in a comparative context.

**2.1.1.1. Summary** A venerable history of warmth and competence dimensions emerges in independent lines of research. One could add self-perception to this list (e.g., independent, agentic vs interdependent, communal) as well as work on perceptions of particular social categories (e.g., the distinction between communion and agency in gender stereotypes). The various labels used for these basic dimensions, however, had (until recently) obscured the pervasiveness and power of the fundamental, underlying dimensions of warmth and competence (Cuddy and Abele, *in press*).

## 2.2. Intergroup perception

### 2.2.1. Centrality of warmth and competence

Numerous in-depth analyses of stereotypes of specific social groups also reveal warmth and competence as central dimensions. These dimensions are evident in stereotypes of older people (Cuddy and Fiske, 2002; Cuddy *et al.*, 2005); Asians and Asian Americans (Kitano and Sue, 1973; Lin *et al.*, 2005; Maddux *et al.*, *in press*); immigrants (Lee and Fiske, 2006); subgroups of gay men (Claussell and Fiske, 2005); subgroups of women (Cuddy *et al.*, 2004; Cuddy and Frantz, 2007; Eckes, 2002; MacDonald and Zanna, 1998); subgroups of Black Americans (Williams and Fiske, 2006); types of mental illnesses (Russell *et al.*, 2007); European nationalities (Cuddy *et al.*, *in press*);

Linssen and Hagendoorn, 1994; Peeters, 1993; Phalet and Poppe, 1997; Poppe and Linssen, 1999); enemy outgroups (Alexander *et al.*, 1999); volunteer organizations (Cadinu and Cerchioni, 2001); linguistic groups (Ruscher, 2001; Yzerbyt *et al.*, 2005); and Fascist depictions of racial groups (Volpato *et al.*, 2007).

Research on the SCM has typically asked an initial sample of participants to generate “important social groups in society” to obtain a list of groups people spontaneously use to classify others (e.g., see Fiske *et al.*, 2002b, for the general paradigm). Later samples are asked to evaluate these groups (as they are stereotyped in society) on warmth and competence traits. Cluster analyses consistently reveal clusters of groups that fit specific warmth–competence combinations, not just in the United States but also in other nations. Further, groups that fit into similar clusters elicit the predicted patterns of emotions and behaviors that the SCM and BIAS map predict. These results suggest that important social groups are characterized in terms of warmth–competence stereotypes that, in turn, guide emotional and behavioral reactions toward those groups. We discuss these studies in greater detail below (section 3–5).

Evidence for the spontaneous use of these dimensions in stereotyping comes from a reanalysis of the Princeton stereotyping series begun by Katz and Braly (1933), Gilbert (1951), Karlines *et al.* (1969), and Leslie *et al.* (2007). Using the original list of 100 adjectives, 5 independent judges categorized each trait appearing in any of the stereotypes in any of the 4 studies. Using 60% agreement as a criterion, 17 traits were categorized as warmth traits, 33 traits were categorized as competence traits, and 34 traits were categorized as neither, so 60% of the spontaneously checked adjectives for 10 ethnic groups over 75 years fit the warmth–competence dimensions. Recall too that in Wojciszke’s (2005a,b) work, 75–82% of the adjectives in trait descriptions fit these dimensions. The difference may be that the Katz–Braly studies used a number of unusual adjectives relevant to international relations (e.g., nation-alistic) but not typical in other kinds of stereotyping or person perception.

### 2.2.2. Ambivalent stereotypes

The hypothesis that many group stereotypes contain both negative and positive components on the warmth versus competence dimensions has garnered ample empirical support. Across outgroups, stereotypes often include a mix of more and less socially desirable traits, not just the uniform antipathy so often assumed. Pitying stereotypes combine warmth with incompetence, portraying some outgroups as neither inclined to nor capable of harm toward members of the ingroup. Envy stereotypes combine competence with coldness, portraying other outgroups as doing well for themselves, but as having negative intentions toward the ingroup.

Several studies locate the majority of a domain’s outgroups in the two ambivalent clusters. In Phalet and Poppe’s (1997) multidimensional scaling

of Central and Eastern European national and ethnic stereotypes, the majority of groups (37 out of 58) landed in these two quadrants: incompetent but moral-social (e.g., Byelorussians, Bulgarians, Czechs) and competent but immoral-unsocial (e.g., Germans, Jews). In the same vein, the Ambivalent Sexism Inventory (ASI; Glick and Fiske, 1996) identifies two types of women as targets of ambivalent prejudice: women who exhibit agentic traits (e.g., feminists, lesbians, and professional women) elicit hostile sexism (HS), a form of envious prejudice. By contrast, women who exhibit communal traits (e.g., housewives) elicit benevolent sexism (BS), a paternalistic prejudice. Traditional stereotypes of men are also ambivalent, casting them as competent, but not warm (Glick and Fiske, 1999; Glick *et al.*, 2004). Stereotypes of successful minority groups (e.g., Asian Americans, Jews) are similarly high in competence but low in warmth (Glick, 2002; Lin *et al.*, 2005). Kay and Jost (2003) have argued that stereotypes often have “complementary” content with positive elements compensating for negative elements. When European Union nations rated each other, all nations fell into the ambivalent combinations; none were uniformly positive or negative (Cuddy *et al.*, 2007). Finally, in SCM research in the United States and elsewhere, the majority of groups are stereotyped as high on one dimension and low on the other, rather than as uniformly high or low on warmth and competence (Cuddy *et al.*, in press; Fiske *et al.*, 2002b).

Despite their ambivalent content, envious and paternalistic stereotypes still function to maintain the status quo and defend the position of societal reference groups (also see Jost *et al.*, 2001 for this argument). Further, as a form of cross-dimensional ambivalence (MacDonald and Zanna, 1998), these combinations are psychologically consistent for perceivers. Because the positive and negative traits attributed to a specific group are on orthogonal dimensions, perceivers can imagine a group as being warm but incompetent or as competent but cold without experiencing the psychological tension that is classically assumed (e.g., by Freud) to be integral to ambivalence. Whatever the exact proportion of ambivalent to univalent group stereotypes may be, prior theory and research has neglected these ambivalent combinations by focusing on uniformly negative stereotypes (see Glick and Fiske, 2001b for a more extended discussion). As we argue below, this has obscured the true nature of important forms of prejudice. These include the oldest form of prejudice—sexism, which has long fostered inequality through paternalism (Glick and Fiske, 1996; Jackman, 1994)—and the most severe form of prejudice—genocidal hatred, which is most commonly directed toward successful, envied minorities (Glick, 2002, 2005).

**2.2.2.1. Warm but incompetent stereotypes** Paternalistic ambivalent stereotypes portray a group who is disrespected but pitied, which carries overtones of compassion, sympathy, and even tenderness, under the right conditions. Such paternalism is evident in race, dialect, age, and gender



prejudice. Ambivalent racism (Katz and Hass, 1986) comprises a mix of anti-Black attitudes (e.g., perceived incompetence and laziness, violating the work ethic) and paternalistic pro-Black attitudes (e.g., perceived pitiful disadvantage, need for help). Linguistic outgroups provide another example: speakers of nonstandard dialects (e.g., Scottish accents in Great Britain, Chicano accents in the United States) are perceived as incompetent but friendly (Bradac, 1990; Ruscher, 2001).

Ageist stereotypes predominantly characterize older people as kind but incompetent, suggesting a similarly ambivalent dynamic (Cuddy and Fiske, 2002). Support for the ambivalent content of elderly stereotypes is plentiful (see Cuddy and Fiske, 2002; Cuddy *et al.*, 2005). Participants rate older people as intellectually incompetent (Rubin and Brown, 1975) and as less ambitious and responsible than younger people (Andreoletti *et al.*, 2001), but also as friendlier and warmer than younger people (Andreoletti *et al.*, 2001). In the workplace, older people are perceived as less competent in job-performance-related tasks than in interpersonal ones (Avolio and Barrett, 1987; Rosen and Jerdee, 1976a,b; Singer, 1986). Moreover, people are quicker at associating elderly names with warmth traits than with competence traits (Zemore and Cuddy, 2000).

Paternalism is most prominent in gender stereotypes. Traditional women (e.g., homemakers) are the paternalistic default when people rate women as a general category (Haddock and Zanna, 1994). This generates the “women are wonderful” effect: highly positive ratings of generic women (Eagly and Mladinic, 1989), because they are viewed as especially warm (or communal), while they are not viewed as particularly competent (or agentic). Traditional women are the objects of BS (Glick and Fiske, 1996, 2001a,b) and paternalistic attitudes (e.g., women require men’s protection and provision).

In sum, the paternalistic stereotypes just described (of disadvantaged Blacks, nonstandard speakers, elderly people, and traditional women) apply to groups that inhabit the incompetent-but-warm corner of the warmth  $\times$  competence space. We discuss some consequences of paternalistic prejudice toward these specific groups in greater detail later in this chapter.

**2.2.2.2. *Competent but cold stereotypes*** In contrast stands a different set of outgroups stereotyped as highly competent but not warm (Glick and Fiske, 2001a,b). Targets of envious ambivalence include nontraditional women, Jews, and Asians. Nontraditional women (e.g., career women, feminists, lesbians, athletes) are acknowledged to be competent, but are viewed as lacking warmth (see also Eagly, 1987; Glick *et al.*, 1997; MacDonald and Zanna, 1998). Derogatory labels for powerful women, such as Iron Maiden, Ice Queen, and Ball Buster, capture this dynamic. Anti-Semitic notions of an international Jewish conspiracy exaggerate Jews’ stereotypically feared competence, whereas views of them as self-serving portray them as not warm (Glick, 2002, 2005). The modern American

equivalent, Asian Americans—who are viewed as the model minority—are seen as highly competent and hardworking, envied as too ambitious, but are simultaneously characterized as unsociable and aloof (Hurh and Kim, 1989; Kitano and Sue, 1973; Maddux *et al.*, in press; Sue and Kitano, 1973; Sue *et al.*, 1975). The Anti Asian-American Prejudice scale measures dislike for Asians' perceived lack of sociability along with envious respect for their perceived competence (Lin *et al.*, 2005). Thus, nontraditional women, Jews, and Asians elicit a shared stereotype as being too competent and not at all nice. We discuss the social consequences of some of these specific groups in greater detail later.

**2.2.2.3. Univalent stereotypes** Not all groups receive ambivalent stereotypes; some groups' stereotypes are evaluatively consistent, or univalent. Low-status groups viewed as openly parasitic (i.e., opportunistic, freeloading, exploitative) are banished to the not warm, not competent cell. These groups, whose members are perceived as *both* hostile and indolent, are most likely to elicit the uncomplicated and untempered antipathy that past prejudice theory and research associates with derogated groups. Such groups are rejected both for their perceived negative intent toward the rest of society (not warm) and their inferred inability to succeed on their own (not competent). We will see that this is a particularly virulent form of prejudice.

Conversely, who is favored as both warm and competent? We suggest three possible reasons why groups are placed in this quadrant. First, in-group favoritism may lead to viewing the ingroup as both warm and competent. Second, close allies (whose status is similar to or greater than the ingroup's and who are viewed as cooperative) should receive a purely positive stereotype. Finally, groups that represent the cultural default (e.g., in the United States, the middle class) may be viewed in a univalent, positive way. We label both ingroups and societal "default" groups as "reference groups" because they tend to be viewed as part of a societal ideal, as when most Americans identify themselves as middle-class (even if qualified by "lower" or "upper"). Similarly, Whites and Christians in the United States, even when not a local majority, may be viewed as culturally dominant, societal reference groups. Even groups who acknowledge their own exclusion from the cultural ideal may still identify with aspects of the societal reference group. These notions are consistent with theories of the influence dominant groups exert in constructing and disseminating legitimizing ideologies that diffuse, to a greater or lesser extent, throughout society (e.g., social dominance theory, Sidanius and Pratto, 1999; system justification theory, Jost and Banaji, 1994; and Jackman's, 1994, theory of paternalism). Hence, people's understandings of culturally shared stereotypes may generally reflect the perspective of society's dominant reference groups.

### 2.2.3. US SCM studies

Now, we describe some of the specific evidence for the SCM, beginning with US samples.

**2.2.3.1. Basic method** We conducted five US studies, comprising of 10 samples with over 1165 respondents, to test SCM predictions regarding (a) the centrality of warmth and competence as dimensions of stereotypes, (b) the prevalence of ambivalent stereotypes, and (c) the relationship of structural variables (status and interdependence) to stereotype contents (Cuddy *et al.*, 2007; Fiske *et al.*, 1999, 2002b). Research samples have been diverse, including not only undergraduates, but also community members (including both middle-aged and older working and retired adults from various US regions) and a representative national sample, which we discuss in greater detail below.

Participants in the SCM correlational studies rated lists of societal groups on competence, warmth, status, and competitiveness. Groups were selected based on frequent nomination by participants in pilot studies who generate lists in response to the question “What various types of people do you think today’s society categorizes into groups?” (Fiske *et al.*, 2002b, Pilot Study 1 and Pilot Study 2). We supplement the groups participants most frequently generate with groups chosen for theoretical reasons or because they had been a focus of past prejudice research, including frequently studied subgroups (e.g., feminists and Black professionals) as well as superordinate groups (e.g., women and Black people, respectively). Final lists include widely varied target groups characterized by occupation, nationality, race or ethnicity, socioeconomic status, religion, and gender subgroups, among others.

Participants rate the social groups on traits related to warmth (warm, nice, friendly, and sincere) and competence (competent, confident, skillful, able), in addition to status and competitiveness, which we discuss later. In long versions of the questionnaire, participants rate between 17 and 25 groups; in a short version, participants rated 6 groups. The scales were developed and refined over the course of the studies (Cuddy *et al.*, 2007; Fiske *et al.*, 1999, 2002b). The original list of traits included both positive and negative items and many items unrelated to warmth and competence. To minimize social desirability biases and to draw on perceived societal stereotypes as culturally shared knowledge, participants were instructed that, “We . . . are interested in how different groups are considered by U.S. society. We are not interested in your personal opinions, but in how you believe others view these groups.” All variables were rated on a 1 (not at all) to 5 (extremely) scale. Principal components factor analyses consistently point to two trait factors—one reflecting warmth and the other reflecting competence. Negative traits did not consistently load onto one factor, so

they were dropped from the lists. Scale reliabilities were sufficiently high for all scales in all samples.

**2.2.3.2. Results** To test the utility of warmth and competence in describing groups, we first examine the two-dimensional array on groups on their warmth and competence means via cluster analyses. We decided that if the dimensions were useful in “sorting” groups, an ideal cluster solution would have to include at least four clusters that differed significantly on warmth and competence. Of the five samples that answered the long versions of the questionnaire, one yielded a five-cluster solution, three yielded four-cluster solutions, and one yielded a two-cluster solution. The short version, which included only six groups, also yielded a two-cluster solution (these data were combined from five samples in a single study). Table 2.1 presents these data by study. Figure 2.1 provides an example of one cluster solution.

The SCM hypothesizes that a substantial number of outgroups will receive ambivalent stereotypes, defined by low ratings on one dimension, coupled with high ratings on the other. Three analyses test the ambivalent stereotypes hypothesis: (a) independent samples *t*-tests comparing warmth and competence between clusters (b) paired *t*-tests comparing warmth and competence within clusters and (c) paired *t*-tests comparing warmth and competence within groups. To be identified as *ambivalent* (high-competence/low-warmth or low-competence/high-warmth), clusters had to meet two conditions: (1) warmth and competence means differed significantly; and (2) the mean for their high dimension was higher than that of groups low on that dimension, and the mean for their low dimension was lower than that of groups high on that dimension. We predicted that all samples would include the two ambivalent clusters, and that the majority of groups would be rated significantly higher on one than the other dimension.

As predicted, all six samples include both a HC–LW cluster and a LC–HW cluster of groups (Fig. 2.1). Some of the groups that consistently landed in the HC–LW cluster were Asians, Jews, rich people, businesswomen, and feminists (all successful minority groups). Some of the groups that consistently landed in the LC–HW cluster were elderly people, housewives, disabled people, and mentally retarded people. Across samples, on average 83% of the groups were rated significantly higher on one dimension than the other, with a range of 74–100%. So, across varied lists of societal groups, the majority of groups received ambivalent stereotypes.

On the questionnaires used in two of the samples, we explicitly included ingroups, which we expected to land in the univalent HC–HW cell (Cuddy *et al.*, 2007, Study 1; Fiske *et al.*, 2002b, Study 2). As expected, these samples produced HC–HW clusters that included the ingroups (e.g., Americans, students, middle-class, Whites). Four of six of the samples produced LC–LW clusters, which included highly marginalized outgroups (e.g., homeless, poor, welfare recipients, drug addicts).

**Table 2.1** Cluster solutions for SCM samples

Sample	Cluster				
	HC– LW	LC– HW	HC– HW	LC– LW	MC– MW
United States					
Fiske <i>et al.</i> (1999) ( <i>n</i> = 42)	X	X	– <sup>a</sup>	–	–
Fiske <i>et al.</i> (2002b)					
Study 1: students ( <i>n</i> = 73)	X	X	– <sup>a</sup>	X	X
Study 1: nonstudents ( <i>n</i> = 38)	X	X	– <sup>a</sup>	X	X
Study 2 ( <i>n</i> = 148)	X	X	X	X	X
Study 3 (short version, <i>n</i> = 230)	X	X	–	–	–
Cuddy <i>et al.</i> (2007)	X	X	X	X	–
International					
Combined EU samples rating EU nations ( <i>n</i> = 755)	XX	X	–	–	–
Europe					
Belgium (US groups, <i>n</i> = 40)	X	X	X	XX	–
Belgium (own groups, <i>n</i> = 43)	X	X	X	XX	–
Bulgaria (rating EU nations, <i>n</i> = 95)	XX	X	X	–	–
Italy: students (rating own groups, <i>n</i> = 180)	X	X	X	X	–
Italy: nonstudents (rating own groups <i>n</i> = 41)	X	X	X	X	–
Norway (rating EU nations, <i>n</i> = 40)					
Asia (rating own groups)					
Hong Kong ( <i>n</i> = 60)	X	X	–	X	X
Japan ( <i>n</i> = 82)	XX	X	–	XX	–
South Korea ( <i>n</i> = 91)	XX	X	–	XX	–
Latin America (rating own groups)					
Costa Rica ( <i>n</i> = 122)	X	X	–	XX	–
Mexico ( <i>n</i> = 89)	X	X	X	X	–
Israel (rating own groups)					
Israel–Jewish ( <i>n</i> = 104)	X	X	X	X	X
Israel–Muslim (rating own groups, <i>n</i> = 100)	–	–	X	X	X

<sup>a</sup> In the first few studies, we did not ask preliminary study respondents to nominate ingroups, so none appeared in these surveys.

Note: LC, low competence; HW, high warmth; MC, medium competence, and so on. “X” indicates one cluster; “XX” indicates two in that quadrant (e.g., HC–LW and HHC–LLW).

**2.2.3.2.1. Summary** In sum, across the 10 US samples, the stereotypes of most groups were ambivalent. That is, most groups were viewed as either competent but not warm, or warm but not competent. A small minority of groups were stereotypically low on both warmth and competence, presumably viewed as both low status and free-riding. Only ingroups and mainstream social groups were perceived as both warm and competent.

#### **2.2.4. Cross-cultural SCM studies: Data from 17 nations**

Any claim that a phenomenon is universal requires testing across multiple cultures (Bond, 1994). American perceivers might be influenced by unique norms, ideologies, and attribution biases that exclusively support our proposed principles. We therefore tested the SCM in 20 non-US samples, representing 17 nations (Cuddy *et al.*, in press). These include 12 samples from 10 European nations (Belgium, Bulgaria, France, Germany, Italy, Netherlands, Norway, Portugal, Spain, and UK), three East Asian nations (Hong Kong, Japan, and S. Korea), three Latin American nations (Costa Rica, Dominican Republic, and Mexico), and two Israeli samples (Jewish and Muslim).

**2.2.4.1. Basic method** In a first study, we used the same target groups as in our US studies, but surveyed a non-US sample of perceivers (Belgium). If the warmth–competence dimensions stem from characteristics specific to the perceivers’ culture, they should fail to generalize to non-US respondents. Next, varying both target groups and respondents’ nationalities, seven EU nations (Belgium, France, Germany, Netherlands, Portugal, Spain, and UK) and two non-EU European nations (Bulgaria and Norway) rated the then-current 15 EU member nations, which constituted an alternative, predetermined set of relevant groups, thereby eliminating concerns about biased selection of target groups and the potentially restricted applicability of the model to US-generated target groups. In the third set of studies, 10 samples from 9 nations (Belgium, Costa Rica, Dominican Republic, Hong Kong, Israel-Jewish, Israel-Muslim, Japan, Mexico, and S. Korea, Cuddy *et al.*, in press; and Italy, Durante and Capozza, 2008) rated lists of relevant groups in their respective societies (generated in pilot studies using participants in the same nation). This combined emic–etic (insider–outsider) approach (Hui and Triandis, 1985) unites culturally indigenous approaches to data collection (i.e., indigenous lists of groups) with imported approaches (i.e., our scales). The goal was to create cross-cultural comparisons using equivalent measures, while simultaneously using ecologically valid targets.

In the studies where local participants listed relevant social groups, separate samples of participants from Belgium, Costa Rica, Dominican Republic, Hong Kong, Israel-Jewish, Israel-Muslim, Japan, Mexico, and South Korea answered the following questions: (1) “Off the top of your

head, what various types of people do you think today's society categorizes into groups (i.e., based on ability, age, ethnicity, gender, occupation, race, religion, etc.)?" (2) "What groups are considered to be of very low status by [Belgian/Costa Rican/Japanese/etc.] society?" (3) "What groups, based on the same criteria used in the first question, do you consider yourself to be a member of?" Question 1 aimed at getting participants to list relevant social groups in the least constrained way. In US studies, however, this question typically yielded lists that failed to include extremely low status outgroups that might fit the pure antipathy model of prejudice, nor did it typically generate ingroups (who, as default groups, may not be listed). Thus, Questions 2 and 3 were intended to insure that all types of groups would be listed. Groups listed by at least 15% of participants were included on the final questionnaire.

A total of 1841 respondents from 17 nations completed a version of the SCM questionnaire (Cuddy *et al.*, in press). University students predominated in most samples, which were 60% female with an average age of 21. Different samples rated different groups. A Belgian sample rated groups from American studies (Fiske *et al.*, 2002b, Study 2), but translated into French. Samples from the nine European nations (eight EU members—Belgium, France, Germany, Italy, Netherlands, Portugal, Spain, and the United Kingdom—and two non-EU members—Bulgaria and Norway) rated the 15 then-current member nations of the European Union. Eight samples from seven nations (Belgium, Costa Rica, Dominican Republic, Hong Kong, Israel-Jewish, Israeli-Muslim, Japan, Mexico, and S. Korea) rated their own lists of relevant groups, generated in pilot studies (described above). Like the groups used in American studies, these groups varied on race, gender, socioeconomic status, occupation, religion, immigration history, and so on.

Participants rated the social groups on items measuring warmth (warm, nice, friendly, sincere) and competence (competent, confident, skillful, able), which were adapted from the US studies (Fiske *et al.*, 1999, 2002b). For each nation, translators converted the questionnaire to the relevant language, and all independent back-translations were satisfactory. As in the initial work, to reduce social desirability biases and to tap consensual stereotypes, participants were told, "We are interested in how different groups are considered by [Belgian, German, Hong Kong etc.] society. We are not interested in your personal opinions, but in how you believe others view these groups." All items were rated on a 1 (not at all) to 5 (extremely) scale; reliabilities were sufficiently high for all scales in all samples, competence  $\alpha = .67-.85$  and status  $\alpha = .69-.84$ .

**2.2.4.2. Results** In all samples, groups spread out fairly equally along the warmth and competence dimensions, producing no fewer than three clusters of stereotypes. Forty-two percent of the samples produced five-cluster

solutions; 33% produced four-cluster solutions; and 25% produced three-cluster solutions (collapsing across EU samples rating EU nations). Moreover, in all samples, at least two clusters significantly differed on both warmth and competence, suggesting that participants were using both dimensions to distinguish groups. Table 2.1 presents the cluster solutions for all samples.

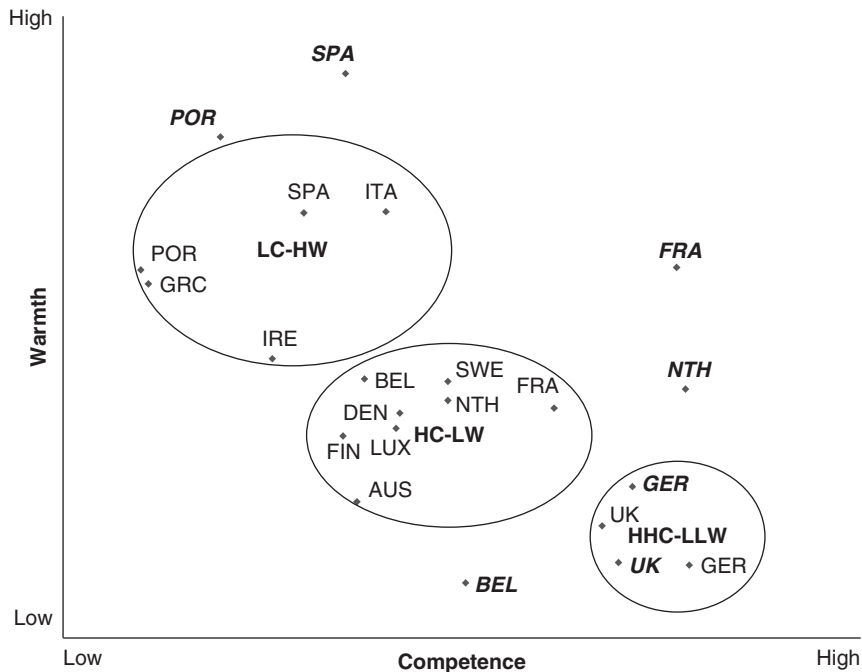
Remarkably, the two ambivalent clusters appeared in 19 of 20 samples. In some samples, more than one of each ambivalent cluster appeared. On average, 79% (S.D. = 13%) of groups were rated significantly higher on one dimension than the other, with a range of 59% (Hong Kong; Cuddy *et al.*, in press, Study 2) to 93%.

**2.2.4.2.1. Europe** We combined the 7 EU samples that rated the 15 then-current EU member nations. The combined sample produced a three-cluster solution, with only ambivalent clusters and the third cluster representing groups that were viewed as hypercompetent and especially lacking in warmth (in addition to a less extreme competent, but also not warm cluster). The LC–HW cluster included Greece, Ireland, Italy, Portugal, and Spain. The HC–LW cluster included Austria, Belgium, Denmark, Finland, France, Luxembourg, Netherlands, and Sweden. The more extreme HHC–LLW cluster—highest on competence and lowest on warmth—comprised Germany and the United Kingdom. Nearly identical patterns replicated in each of the individual EU samples. Participants rated the majority of groups (87%) higher on one than the other dimension, and this held across samples, ranging from 53% (France) to 100% (Spain). Fig. 2.4 depicts the cluster solution.

The emphasis on ambivalence (no one is perfect, but no one is all bad or all good) did not stem from shared EU membership. Results were very similar for Norway and Bulgaria (European nations that were not EU members at the time): the majority of groups differed significantly on warmth and competence—93% in Bulgaria and 87% in Norway. They also produced very similar cluster solutions to the combined EU samples, each with two HC–LW clusters and one LC–HW cluster; Bulgaria also generated a HC–HW cluster that included Italy and Spain. These EU samples produced no LC–LW clusters. Thus, no nation occupied the HC–HW (i.e., favored) cell, indicating that no nation represents an agreed-upon ideal European prototype.

In the EU samples, each nation rated itself (ingroup) and six other nations (outgroups), so six outgroups and one ingroup rated each nation, providing a rare opportunity to compare ingroup and outgroup ratings of the same group. Comparing each nation's self-rated warmth and competence (e.g., Italians rating Italy) to that nation's average warmth and competence ratings of all the other groups (e.g., Italians rating all other EU nations) revealed that participants on average rated their own nation as marginally more competent, but not as more warm, than other nations.





**Figure 2.4** Stereotype content model warmth by competence mapping of EU member nations rating themselves (bold) and other nations, as seen by the EU community. Source: Cuddy *et al.* (in press). Reproduced by permission.

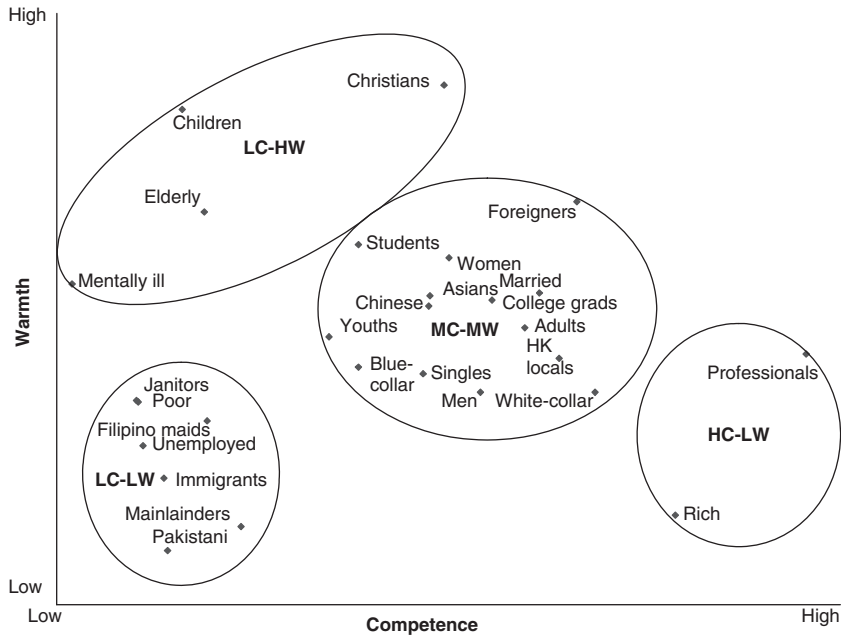
We also compared nation's self-rated warmth and competence (e.g., Italians rating Italy) to the aggregated warmth and competence ratings of that nation made by people in other nations (e.g., all other participating nations rating Italy). This analysis produced mixed results. Some nations rated themselves significantly higher than they were rated by other nations on either competence (Netherlands, Belgium) or warmth (Spain, Portugal) or both (France), whereas others disfavored themselves on either competence (Germany) or warmth (Belgium). Yet, other self-ratings were close to the average other-ratings (Germany, Netherlands on warmth, Portugal, Spain on competence, United Kingdom on both). Apparently, higher-status groups favored their ingroup on dimensions that reflect obvious status differences (i.e., competence), whereas lower-status groups favored their ingroup on dimensions irrelevant to status (i.e., warmth), thus insuring positive differentiation from other groups (Ellemers *et al.*, 1997; Mummendey and Wenzel, 1999; Poppe, 2001; Spears and Manstead, 1989; Van Knippenberg and Van Oers, 1984). These results are similar to those obtained by Jost *et al.* (2001).

In contrast to stereotypes of European nations, cluster solutions were more similar to those found in the United States when European samples rated social groups within their own societies (Belgium and Italy) or the social groups originally generated by US participants (another sample in Belgium). All three of the samples that rated social groups within their societies produced the predicted four combinations of high and low warmth and competence stereotypes (with no additional clusters). The majority of groups ( $M = 78\%$ ,  $SD = 9\%$ ) in these samples were rated significantly higher on one than the other dimension, ranging from 67% (Italy non-students) to 87% (Belgium). Moreover, these samples produced HC–HW clusters that included ingroups or societal prototype groups (e.g., well-educated people and Northerners in Italy; Wallonians and Catholics in Belgium), and LC–LW clusters that included extreme outgroups (e.g., poor, unemployed, and immigrants in both Belgium and Italy).

In short, European national stereotypes were dominated by ambivalent stereotypes (i.e., viewed as warm and incompetent or as competent and cold), with univalent stereotypes being conspicuously absent, even when people rated their own nation. By contrast, when rating groups within their own societies (or social groups generated by past research in the United States), all of the expected combinations of warmth and competence occurred.

**2.2.4.2.2. East Asia** Including East Asian samples is particularly important for assessing claims of universality because Asian cultures tend to differ substantially from the United States on the often-cited individualism–collectivism (IC) dimension, relevant to psychological processes that underlie stereotyping (e.g., Hofstede, 1980; Triandis, 1995). Each of the three Asians samples (Hong Kong, Japan, and South Korea; Cuddy *et al.*, in press, Study 2), which rated their own societal groups, produced at least one HC–LW cluster and at least one LC–HW cluster. The majority of Asian groups (76%) scored significantly higher on one than the other dimension, with a range of 59% (Hong Kong) to 90% (South Korea). All three Asian samples also produced at least one LC–LW cluster. Figure 2.5 depicts data from the Hong Kong sample (Fig. 2.6).

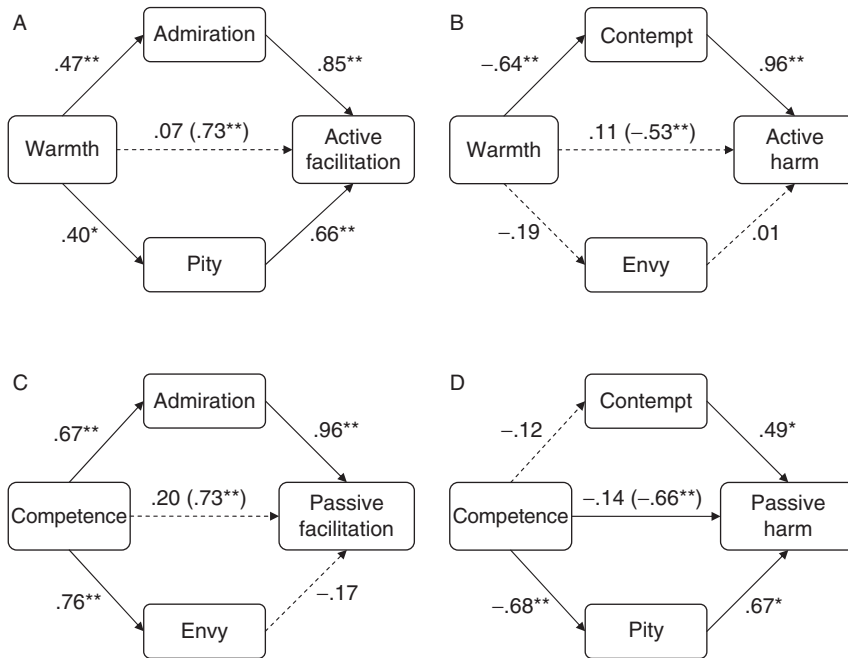
However, none of the Asian samples produced a HC–HW cluster, typically reserved for ingroups and societal prototype groups, in spite of the fact that we explicitly asked participants in the preliminary groups-listing studies to list ingroups. Instead, these groups (e.g., college graduates, full members of society, educated, middle-class, and students) migrated toward the middle of the warmth–competence space. Some occupied the HC–LW clusters (e.g., Japan: my university, students); some occupied the LC–HW clusters (e.g., Japan: family, friends, Japanese, my clubs; South Korea: college students, middle-class), and some occupied a MC–MW cluster (e.g., Hong Kong: Asians, Chinese, students).



**Figure 2.5** Stereotype content model warmth by competence mapping of societal groups in Hong King, as rated by Hong King Chinese students. *Source:* Cuddy *et al.* (in press). Reproduced by permission.

A more fine-grained analysis isolated one group guaranteed to be an in-group for all samples, namely students. Table 2.2 compares the three relatively collectivistic East Asian samples with three relatively individualist Western samples that rated similar groups. The individualists rate students significantly higher than the average of other groups ( $ps < .01$ ), whereas none of the collectivists did. Collectivists attenuating reference-group favoritism fits well-documented IC modesty concerning self (e.g., Heine *et al.*, 1999; Kitayama *et al.*, 1997). Thus, midward migration of reference-group clusters fits collectivists being less likely to rate themselves and their ingroups too positively.

**2.2.4.2.3. Israel** We collected data from one Jewish and one Muslim Israeli sample, in which each rated its own societal groups. The Jewish Israeli sample produced a five-cluster solution, with one cluster per cell and one middle cluster. Participants rated the majority of groups (88%) as significantly higher on either competence or warmth. Reference groups (e.g., educated, Jews, and seculars) landed in the HC–HW cluster. Thus, the Jewish Israeli sample resembles the American and European samples, perhaps not surprising because most of their families emigrated from those countries.



**Figure 2.6** BIAS map mediation models of stereotypes predicting emotions predicting behaviors, for each quadrant of the stereotype content model space. *Source:* Cuddy *et al.* (2007). Reproduced by permission.

The Muslim Israeli sample was the only one that deviated from the SCM, producing neither ambivalent cluster and rating just less than half the groups (46%) significantly higher on one dimension. Also unusual, the Muslim Israeli sample located clear outgroups (e.g., Jews, leftists, seculars) in the HC–HW cluster, above reference groups (e.g., Arabs and Palestinians), which landed in the MC–MW cluster. These unusual results warrant further investigation.

**2.2.4.2.4. Latin America** The Latin American samples (Costa Rica and Mexico) rated their own societal groups. Both of these samples produced the two ambivalent clusters: one HC–LW cluster and one LC–HW cluster. The majority of groups (88% in Costa Rica, 78% in Mexico) were rated significantly higher on competence or warmth. Both samples also produced univalent HC–HW and LC–LW clusters.

**2.2.4.2.5. Summary** Across culturally varied perceivers and targets, cluster analyses corroborated the claim that perceived warmth and competence universally differentiate stereotypes. Comparing warmth and competence—within groups, within clusters, and between clusters—supported

**Table 2.2** Reference-group favoritism ratings

Sample	Competence	Warmth	General positivity (warmth + competence mean)
Collectivist samples (Cuddy <i>et al.</i> , in press)			
Hong Kong	-.06	.39*	.17
Japan	.10	-.07	.02
Korea	.19	.17	.18
Individualist samples			
Belgium (Cuddy <i>et al.</i> , in press)	.36*	.51*	.44*
United States (Fiske <i>et al.</i> , 2002b, Study 2)	.39*	.17*	.29*
United States (Cuddy <i>et al.</i> , 2007, Study 1)	.72*	.46*	.49*

\*  $p < .01$ .

Note: Values represent difference between the mean for the ingroup “students” and the mean for all other groups in that sample. High numbers indicate higher scores for students (i.e., more reference-group favoritism).

the claim that many outgroups receive ambivalent stereotypes as competent but not warm, or as warm but not competent. Across studies and samples, the majority of groups significantly differed on warmth and competence, and both ambivalent combinations occurred in almost all (19 of 20) samples. The prevalence of ambivalent groups is striking given that past prejudice theory and research has emphasized univalent derogation of outgroups. The weight of the data we have collected, in a variety of nations, clearly contradicts prior assumptions about intergroup relations.

### 2.3. Primacy of warmth

Both warmth and competence consistently emerge as core dimensions of social perception. What’s more, considerable evidence suggests that warmth judgments are primary, both in the sense that warmth is judged before competence and that warmth judgments carry more weight in affective and behavioral reactions. From an evolutionary perspective, the primacy of warmth makes sense because another’s intent for good or ill matters more to survival than whether the other can act on those goals. Similarly, morality (warmth) judgments determine approach-avoidance tendencies, making them the fundamental aspect of evaluation (Cacioppo *et al.*, 1997; Peeters, 2001) and therefore prior to the competence-efficacy judgments. People infer warmth from the perceived motives of the other (Reeder *et al.*,

2002). Research confirms that information about the moral–social dimension is more cognitively accessible, more sought-after by perceivers, more predictive, and more heavily weighted in evaluative judgments. The warmth dimension predicts the valence (i.e., positive or negative) of interpersonal judgments, whereas the competence dimension predicts impression extremity (i.e., *how* positive or *how* negative) (Wojciszke *et al.*, 1998, 1993). Note that Asch intuited the priority of the warmth dimension by manipulating it against a background of competence-related traits; as noted above, warm–cold changes the Gestalt impression of a competent person.

### 2.3.1. Importance of “other profitable” traits

Moral–warmth traits facilitate or hinder mainly other people, whereas competence traits facilitate or hinder mainly the self. That is, the moral–warmth, “other–profitable” traits include *kind*, *honest*, and *aggressive* because they immediately bear on people around the judged person. “Self–profitable” traits include *competence*, *intelligence*, and *efficiency* because they directly and unconditionally bear on the possessors’ chance to achieve their goals (e.g., Peeters, 2001). In a series of studies, Wojciszke *et al.* (1998) demonstrated the primacy of warmth traits in global evaluations of others. First, participants who were asked to list the most important personality traits listed significantly more warmth traits than competence traits, and the five most frequently listed traits were warmth-related (sincere, honest, cheerful, tolerant, and loyal) (Wojciszke *et al.*, 1998, Study 1). Second, when asked to select traits that would help them decide whether a target person deserved their generally positive opinion, participants selected significantly more warmth than competence traits. Third, warmth was a significantly stronger predictor (accounting for 59% of the variance) than competence (accounting for 29% of the variance) of global impressions of familiar others. Fourth, the warmth content of a fictitious other’s behaviors was the strongest predictor of global evaluations of the target, whereas competence content only weakly modified the intensity of the evaluation. Fifth, evaluations based on warmth information were strong and stable; evaluations based on competence information were weak and dependent on accompanying warmth information. And sixth, regardless of the valence of the competence information about a target, negative warmth information always elicited negative global evaluations, and positive warmth information always elicited positive global evaluations. Corroborating the importance of other profitable traits, recent work reveals that the majority of cultural universals fall into socio–moral (i.e., warmth) domain and that people’s implicit theories of how behaviors imply traits is fairly consensual across cultures in the domain of warmth, but not in the domain of competence (Ybarra *et al.*, in press). Thus, warmth assessments are primary, at least from the observer’s perspective (Wojciszke, 2005b).

### 2.3.2. Rapidity of warmth judgments and accessibility of warmth information

Cognitively, people prove more sensitive to warmth information than to competence information. In lexical decision tasks, social perceivers identified warmth-related trait words faster than competence-related trait words, even when controlling for word length (Ybarra *et al.*, 2001). In rapidly judging faces at 100 ms exposure times, social perceivers judged trustworthiness most reliably, followed by competence (Willis and Todorov, 2006). Reliability was calculated as correlations with time-unconstrained judgments of the same faces, and it is striking that people made these judgments in a fraction of a second, with moral-social judgments occurring first. In another series of studies (Hack *et al.*, 2007), perceivers judged warmth faster than competence in (a) an anticipated interaction paradigm, (b) a photo evaluation task without contextual cues, and a photo evaluation task including SCM groups that varied in status and competition. Converging evidence across investigators supports the priority of warmth in social perception.

### 2.3.3. Perceivers and situations moderate the primacy of warmth

The priority of detecting warmth over competence, though robust, is stronger for some kinds of perceivers. Women, whose gender roles emphasize communal (warmth) over agentic (competence) traits (Abele, 2003) especially show this difference (Wojciszke *et al.* 1998). Communal traits affect their lives more, whereas competence traits affect men relatively more (Abele, 2003). In parallel, collectivistic orientations emphasize the social-moral dimension, whereas individualistic orientations emphasize the competence dimension (Wojciszke, 1997).

The primacy of warmth is also moderated by self-other outcome dependency. The impact of competence on global evaluations of close others is greater than the impact of competence on global evaluations of distant others, although warmth still has a greater impact (Abele and Wojciszke, 2007). For example, competence affects global evaluations of others when it contributes to the perceiver's well-being, such as when the perceiver's (e.g., an employee) positive outcome is contingent on the target's (e.g., the boss) competence.

Similarly, the accessibility of the two dimensions depends in part on situational pressures. Depending on the context that is primed, people construe ambiguous social behaviors (e.g., tutoring another student, avoiding a car accident, failing to cheer up a sibling, leaving a meeting) in either competence or warmth terms. When actions are framed from the actor's (self-related, individualistic) perspective, people interpret the behaviors in competence terms, but when actions are framed from the observer's (other-related, collectivistic) perspective, participants interpret them in more warmth-moral terms (Wojciszke *et al.*, 1998).

#### 2.3.4. Diagnosticity of warmth and competence information, positive and negative

Social perceivers engage a complex calculus regarding relative diagnosticity of the two fundamental dimensions. They asymmetrically process positive-negative warmth information and positive-negative competence information, but in opposite ways: Perceivers sensitively heed information that confirms others' competence and that disconfirms others' warmth. (Kubicka-Daab, 1989; Singh and Teoh, 2000; Skowronski and Carlston, 1987; Tausch *et al.*, 2007; Ybarra and Stephan, 1999). For example, perceivers weight intelligent behaviors more heavily than unintelligent behaviors when evaluating another's general competence, but weight unsociable behaviors more heavily than sociable behaviors when evaluating another's general warmth/likeability (Singh and Teoh, 2000; Skowronski and Carlson, 1987). In social networks, perceivers view negative warmth traits and positive competence traits as transitive: If someone is perceived as unfriendly (or intelligent), then others in that person's social network — even if connected only through indirect ties (i.e., a friend of a friend) — also are perceived as unfriendly (or intelligent; Wang and Cuddy, 2008).

Heightened sensitivity to disconfirming warmth information reflects concerns about others' intentions or motives (Reeder *et al.*, 2002). To be perceived as warm, a person must consistently behave in moral-sociable ways; a negative deviation eliminates the presumption of morality and is attributed to the person's (apparently unfriendly and untrustworthy) disposition. On the other hand, a person perceived as cold may sometimes behave in moral-sociable ways, but will continue to be perceived as unfriendly and untrustworthy; positive deviations are easily explained by situational demands. After all, even evil people may be nice when it suits them. In other words, mean and untrustworthy behavior is more diagnostic because it is usually attributed to the other's disposition, not to social demands. Perceivers interpret warm behavior as highly controllable, and thus non-diagnostic.

In contrast, perceivers presume that competent behavior is not under immediate personal control. Hence, competence is asymmetrical in a different way. That is, a person perceived as competent may behave competently most of the time, and a few incompetent behaviors do not undermine the perception of general competence. (Consider the absent-minded professor.) However, a person perceived as incompetent, who presumably lacks the ability, can never behave competently without challenging the perceived incompetence. For competence, positive (as compared to negative) behavior is more diagnostic: Competence is usually attributed to the other's abilities, not to social demands.

Sometimes the dimensions mix: Competent behavior is judged especially as diagnostic when the other is perceived as immoral-unsociable; the competence of an enemy is potentially of greater consequence than the competence of a friend (Peeters, 2001). Thus, asymmetries in processing positive versus negative warmth and competence information boil down to their relative



diagnosticity for personality impressions (Fiske, 1980; Skowronski and Carlston, 1987; Tausch *et al.*, 2007; Ybarra and Stephan, 1999).

**2.3.4.1. Summary** Although both dimensions are fundamental to social perception, warmth judgments appear primary, reflecting the importance of first assessing others' intentions before determining the other's ability to carry out those intentions. Negative (versus positive) warmth information and positive (versus negative) competence information more heavily influence social perception due their perceived diagnosticity of others' dispositions. These patterns signal sensitivity to potential threats, which aids in survival value for any organism.

### 3. SOCIAL STRUCTURAL ROOTS OF WARMTH AND COMPETENCE JUDGMENTS

The SCM suggests that warmth and competence judgments result from the social structural relations between individuals and groups. Because all complex societies are hierarchically organized and have limited resources, we argue that not only the two dimensions but also their social structural predictors ought to generalize across cultures. Specifically, we argue that two variables long identified as important in intergroup relations—competition and status—predict warmth and competence judgments. People viewed as competitors are judged as lacking warmth, whereas people viewed as noncompetitors are judged as warm; people viewed as high status are judged as competent, whereas people viewed as low status are judged as incompetent. In addition to demonstrating these relationships in research on actual groups in the United States (Cuddy *et al.*, 2007; Fiske *et al.*, 2002b, 1999), we will see that they replicate in investigations of experimentally created groups (Caprariello *et al.*, 2007; Oldmeadow and Fiske, *in press*) and interpersonal perception (Russell and Fiske, 2007).

Status and competition underlie group bias for a number of reasons. By taking into account structural relationships between groups (*i.e.*, perceived competition-cooperation and group status differential), a target's group membership provides the information necessary to quickly answer the two functional questions we raised at the beginning of this chapter: (a) Does the other intend help or harm? and (b) can the other carry out this intent? If social perception operates in the service of interaction goals (Fiske, 1992), then understanding an outgroup's intentions and capabilities of carrying out those intentions ought to be a primary motive in perceiving social entities. And though perceiving individuals as social entities differs from perceiving groups (Hamilton and Sherman, 1996; Sedikides *et al.*, 1998), using group membership as a categorization heuristic contributes to the tendency to interpret behavior as confirming a stereotype (Taylor, 1981).

Second, linking social structure to traits legitimates unfair social structures over which people feel they have no control (for a review, see Glick and Fiske, 2001a). Legitimizing ideologies relieve people's compunction about cooperating in a social system that inflicts pain on self or others by justifying the system as fair. For example, self-interest motivates people to believe that those who suffer have brought about their own misery, eliciting just-world beliefs that outcomes are typically deserved (Lerner and Miller, 1978), such as that groups with high-status and well-paying jobs must have earned these outcomes through talent and hard work. The status-competence correlation in fact varies by individual differences in just-world beliefs (Oldmeadow and Fiske, *in press*). Similarly, social dominance orientation—the belief that group hierarchies are inevitable, even desirable (Sidanius and Pratto, 1999)—also increases the perceived status-competence correlation (Oldmeadow and Fiske, *in press*). In these studies, perceivers saw photographs of more and less expensive houses, judging the probable competence, intelligence, and so on, of the occupants.

In a related vein, system-justification legitimates group-level sociopolitical and socioeconomic inequalities (Jost and Banaji, 1994). Superordinate groups justify their advantage by viewing the status quo as fair, and even subordinate groups may endorse this view because it explains their own outcomes. In a system with clear status differences, high status confers favorable competence stereotypes for perceivers in the dominant group. To lessen the dominant group's responsibility for inequalities among groups, cooperative subordinate groups are granted warmth stereotypes, which do not challenge (and may even reinforce current status relations) by pacifying subordinates, who are allocated a "safe" way to positively differentiate themselves (e.g., Jackman, 1994). Also, system-justification theory explains that even disadvantaged groups are motivated to believe in the fairness of structural inequality, in the belief that they might yet succeed, in turn endorsing their own group's negative stereotypes (Jost *et al.*, 2001). Thus, group status predicts competence stereotypes because it justifies beliefs in fairness and meritocracy. Competition negatively predicts warmth stereotypes because this excludes groups with goals that conflict with those of the ingroup. When a group is viewed as competing for resources, such as tax dollars, people tend to attribute this behavior to the group's alleged malice. Given this general theoretical background on legitimating groups' positions in society, we now examine separately the reasons for the status-competence and competition-warmth predictions.

### 3.1. Why social status should predict competence judgments

SCM predicts that a group's position on the competence dimension can be predicted from their perceived status relative to other groups in society. High status groups (e.g., rich people) are believed to be competent, whereas low status groups (e.g., poor people) are believed to be incompetent, presumably

based on the common but flawed assumption that status invariably derives from ability (as opposed to such factors as opportunity, inheritance, or luck; Fiske *et al.*, 1999, 2002b). In short, status assesses the capability of groups to control resources. High-status groups typically are powerful as well, giving them control over obtaining and providing resources. Indeed, although status is defined by position in society, it often links to power, which is defined by the ability to regulate resources (Fiske, 1993). Therefore recognition of status (and the presumed control over resources) is inherently linked to perceived competence. People may therefore simply infer a group's traits from their social position. This tendency may be especially strong in Western cultures, in which people tend to overuse internal dispositions, ignoring the influence of the situation or context (Gilbert and Malone, 1995; Jones, 1979; Ross, 1977). Thus, when a group is supposedly overrepresented in high-status jobs and prestigious universities, people may attribute this outcome to the group's perceived competence.

### 3.2. Why competition should predict warmth judgments

SCM specifically predicts that competition predicts (low) perceived warmth because of the function it serves in the structural relations between groups' incompatible goals. Compliant, subordinate groups fulfill a convenient role, so they receive paternalistic prejudice. Dominant groups disrespect their competence but simultaneously like the qualities that keep them subordinated, as long as they don't view them as threatening. Warmth-related identities placate subordinates by assigning them socially desirable traits that conveniently also imply deference to others (Glick and Fiske, 2001b; Ridgeway, 2001). Negative intentions will not be attributed to noncompetitive outgroups, whereas attributions of warmth to these groups help to maintain the status quo with a minimum of conflict (Jackman, 1994). Disabled people and housewives, groups that are not viewed as competing for economic and educational resources, are rated as warmer than virtually all other groups, including most majority groups.

The ingroup, its allies, and reference groups do not compete with themselves, so they are acknowledged as warm. The cultural default groups (middle-class, Christian, heterosexual) may not be viewed as competitive, precisely because they possess cultural hegemony. Support for the prediction that competition drives perceptions of warmth also comes from the Phalet and Poppe (1997) and Poppe and Linssen (1999) studies, in which perceived international conflict negatively predicted socially desirable traits (morality or warmth).

By contrast, groups that are perceived as competitive are stereotyped as lacking warmth. This holds true both for both low- and high-status groups. Competitive outgroups elicit frustration and resentment, making it likely that competing goals will be attributed to the outgroup's negative intent (i.e., lack of warmth). A primary source of negative affect toward outgroups results from perceived incompatibility of their goals with ingroup goals (Fiske and Ruscher,

1993). If successful, outgroups receive grudging respect for their envied control over resources, but are never liked or seen as warm.

High-status, competitive groups, such as Asians and Jews in the United States, are viewed as successfully competing for economic and educational resources with mainstream society (Glick and Fiske, 2001b); these groups are rated as significantly less warm than middle-class people and Christians (both majority groups). Low-status groups are not viewed as successful competitors, but nevertheless tend to be seen as exploitative or “competing” in the sense that whatever resources go to them represent a drain on the rest of society. Low-low groups (e.g., welfare recipients) are viewed in a zero-sum system as parasites who contribute little yet suck up resources (e.g., through public assistance subsidized by taxes). Because their goals are perceived as incompatible with the rest of society’s, they are not seen as warm.

In short, competition addresses the question of intent. Competition pits the desired resources of one social group against others, and to compete successfully, one must intend to maximize one’s resources over others’ resources. Determining whether other groups have incompatible goals allows groups to recognize potential threats to resources (Fiske, 1993). Knowing that a group intends to compete for resources suggests that group members have negative intentions toward others (making them cold, unfriendly, and untrustworthy); characterizing such groups as cold helps to motivate the ingroup to compete. By contrast, knowing that a group intends to cooperate suggests positive intentions toward others (warmth, friendliness, and trustworthiness); the positive stereotype motivates the ingroup to cooperate.

### 3.3. US tests of SCM structural hypotheses

Having described the general theory behind the structural hypotheses, and the more specific rationale for the specific competition–warmth and status–competence effects, we now review the accumulating evidence.

#### 3.3.1. Correlational evidence

In the 5 US studies described previously, comprising 10 samples of diverse participants (including one national random sample), participants also rated the same groups on items measuring perceived status and perceived competitiveness (Cuddy *et al.*, 2007; Fiske *et al.*, 1999, 2002b). Perceived status was assessed by perceptions of the degree to which members of a group generally hold prestigious jobs, have economic success, and attain a high education level. Perceived competitiveness was assessed by the degree to which a group’s perceived resources or power take resources or power away from the rest of society, and the degree to which the group receives “special breaks.” Again, in long versions of the questionnaire, participants rated between 17 and 25 groups; in a short version, participants rated 6 groups (Fiske *et al.*, 2002b, Study 3). The social structural measures were developed

and refined over the course of the studies (Cuddy *et al.*, 2007; Fiske *et al.*, 1999, 2002b) and principal components factor analyses consistently recovered two social structure factors, status and competitiveness. Participants made the ratings based on “. . . how you believe others view these groups.” Scale reliabilities were sufficiently high for all scales in all samples.

We calculated correlations two ways. At the group level, we averaged ratings across participants for each of the groups, and then calculated the correlation coefficients from the group means. At the individual level, we calculated correlations separately for each individual participant, converted them using Fisher's  $r$  to  $z$ , averaged them, and reverted them to  $r$ s. The group-level procedure uses a smaller  $n$ , but stable means that mask participant-level variation, thus producing larger  $r$ s. The individual-level procedure lacks stable means but provides more power. Here, we will present only the individual-level correlations, a more conservative estimate than the group-level analysis. As predicted, status ratings correlated positively with competence ratings in all samples, and the effect size is large: mean  $r = .81$ , range = .64–.87 (Cuddy *et al.*, 2007; Fiske *et al.*, 2002b). Competition ratings correlated negatively with warmth ratings in all samples, and the effect size is medium: mean  $r = -.29$ , range = -.11 to -.43. Although the competition–warmth were more modest, we suspect this is due to measurement error in the competition variable, which has focused on economic competition, while omitting symbolic, value-driven competition, which may matter more in intergroup structural relations.

### 3.3.2. Experimental evidence: Intergroup and interpersonal

Of course, correlations remain open to the alternative that perceivers are reasoning in reverse, deducing from stereotypic traits that the groups must have the requisite competitive intent and status. We extended the correlational findings by manipulating the social structural variables of competition and status, then measuring subsequent changes in perceived warmth and competence (as well as emotional reactions, which we will discuss later). We present data at both intergroup and interpersonal levels of analysis.

**3.3.2.1. Intergroup experiments** We presented participants with a fictitious immigrant group, systematically varying both its competition with other groups and its status (Caprariello *et al.*, 2007). Undergraduate students read a vignette depicting an unfamiliar ethnic group said to be immigrating to the United States in the near future. In a  $2 \times 2$  between-subjects design, the questionnaires varied the group's home-country competitiveness (“they take power and resources from” versus “share power and resources with members of other groups”) and its status (“they typically have prestigious jobs, and are well educated and economically successful” versus “low-status jobs, and are uneducated and economically unsuccessful”). Participants were then asked “When members of this ethnic group arrive here, to

what extent will people here be likely to view incoming group members in the following ways?” Participants then rated the hypothetical ethnic group on warmth and competence adjectives. As the SCM predicts, status affected competence but not warmth ratings, such that high-status groups were rated as more competent than low-status groups. By contrast, competitiveness affected warmth but not competence ratings, such that competitive groups were rated as less warm than cooperative groups. Thus, evidence for these social structural predictors (status and competitive or cooperative interdependence) is not only correlational, but also causal.

**3.3.2.2. Interpersonal experiments** Here, we report interpersonal analogs to these intergroup findings, strengthening the causal direction from structure to perceived traits. As interpersonal analog to intergroup relations, interpersonal relationships should similarly determine perceived warmth and competence. We have argued that the SCM’s principles are universal. If the structural, dimensional, emotional, and behavioral predictions generalize from intergroup to interpersonal interactions, then the argument for universality is strengthened. We describe some research that begins to tackle the interpersonal level of analysis (Russell and Fiske, 2007).

In a pair of studies, students arrived for an experiment in which they were told that they and another student would play a game for cash rewards (prisoner’s dilemma in Study 1, trivia challenge in Study 2). They learned that they would be competing or cooperating with their partner. In Study 1, the payoff matrix was framed to promote either cooperation (“Team Game”) or competition (“Winner Takes All”), and in Study 2, the reward was contingent either on their joint performance as a team competing with other student teams or based on their dyadic competition. They also learned that their partner’s status was either high or low, through social class information in Study 1 and through random assignment to boss and subordinate roles in Study 2.

In Study 1, they rated their partner both before and after the interaction. The ratings beforehand were based on the minimal information contained in the status and interdependence manipulations and on allegedly subliminal information conveyed in rapidly presented sentences that actually contained no information. Cooperative-frame participants rated their partners as reliably warmer than competitive-frame participants. After they played the game (with a computer programmed to respond tit-for-tat), their ratings still reflected the cooperative or competitive framing established before the interaction. Study 2’s manipulation of reward contingency, in an after-only design, also showed significant effects of interdependence on perceived warmth, after an actual, spontaneous interaction with another naïve participant.

The status-competence effects also supported the SCM, in both before-and-after ratings (Study 1) and in post-interaction-only ratings in Study 2. The findings are particularly striking in two respects: first, that they survived

both standardized responses (Study 1) and spontaneous responses (Study 2), and second, that they occurred even when their basis was patently arbitrary (Study 2's status manipulation was accomplished by shuffling the "boss" and "subordinate" cards; both studies' competition manipulations were simply the experimental instructions in a short-term game). In Study 2, participants also were asked whether situational factors, such as the structure of the game, had influenced their rating; they denied it, but they did think that their partner's disposition caused their ratings. Finally (Study 3), yoked judges were asked if they thought such manipulations would affect their own reactions, and none of them predicted that the structure of the interpersonal relationships would affect their trait perceptions.

The SCM structural predictions apparently operate at the level of interpersonal interactions, as well as intergroup interactions, but lay people do not seem to be aware of this. Instead, they viewed their perceptions as dispositional—the interpersonal version of stereotyping an outgroup instead of understanding that perceptions are shaped by social structure. Most important, SCM predictions hold for personal impressions as well as for societal stereotypes.

### 3.4. Cross-cultural tests of SCM structural hypotheses

As already described, we collected SCM data in 17 nations. As in the US samples, participants rated the same groups on the traits (warmth and competence) and the two social structure scales (status and competitiveness). In all 20 samples, exactly as hypothesized, perceived status highly correlated with competence ratings, with a large effect size (average  $r = .77$ ). This held both for samples from relatively individualistic societies (average  $r = .80$ ) and from relatively collectivistic societies (average  $r = .74$ ). Table 2.3 presents the status–competence correlations for all samples. Although these correlations are large enough, raising issues of divergent validity of the two scales, the status and competence items clearly do not measure the same construct: The status measure is wholly demographic, whereas the competence measure comprises traits. These findings suggest that people generally view their societies as meritocratic, inferring that high-status groups must also be highly competent.

The relationship between competitiveness and warmth was not as consistent, but was significant in 70% of the samples, and negative (as predicted) in all samples but one (Israel-Muslim). Across samples, the effect size was small but reliable (average  $r = -.17$ ). Correlations were similar for relatively individualistic cultures (average  $r = -.22$ ) and relatively collectivistic cultures (average  $r = -.21$ ). Again, we believe the diminished correlations in some samples can be explained by the fact that we had restricted our measure of competition to zero-sum negative economic interdependence; all items measured power and resource tradeoffs (i.e., if this group gains power, other groups in society lose power; resources going to this group take

**Table 2.3** Social structure–stereotype correlations, all studies

Study	Status– competence, <i>r</i>	Competition– warmth, <i>r</i>
US data		
Fiske <i>et al.</i> (2002b)		
Study 1: students	.83**	–.22**
Study 1: nonstudents	.64**	–.11*
Study 2	.88**	–.31**
Study 3	.87**	–.36**
Cuddy <i>et al.</i> (2007)	.83**	–.43**
International data		
EU nations rating EU nations		
Belgium	.72**	–.48**
France	.63**	–.02
Germany	.68**	–.15*
Netherlands	.84**	–.05
Portugal	.85**	–.17**
Spain	.87**	–.15*
UK	.85**	–.04
EU combined	.89**	–.25**
Europe		
Belgium (US groups)	.75**	–.30**
Belgium (own groups)	.69**	–.33**
Italy: students (own groups)	.77**	–.21**
Italy: nonstudents (own groups)	.73**	–.19**
Bulgaria (rating EU nations)	.72**	–.10
Norway (rating EU nations)	.84**	–.09
Asia (rating own groups)		
Hong Kong	.87**	–.15*
Japan	.75**	–.17**
South Korea	.64**	–.39**
Latin America (rating own groups)		
Costa Rica	.73**	–.17*
Mexico	.67**	–.16*
Israel (rating own groups)		
Israel-Jewish	.83**	–.22**
Israel-Muslim	.55*	.08

\*  $p < .05$ .\*\*  $p < .01$ .

*Note:* Correlations were calculated at the level of individual participants, not group means. Consistently across studies, off-diagonal (i.e., status-warmth, competition-competence) correlations were either nonsignificant or significantly smaller than the on-diagonal, predicted correlations reported above.



resources away from the rest of society). If we had used value trade-offs, the effects might have been stronger. Also, all but one (Israel-Muslim) of the samples that failed to produce significant competitiveness-warmth correlations were rating fellow E.U. nations. Our construction of competition might have been less relevant for this particular set of groups, given that either (a) participants and groups belonged to the same superordinate economic category, the European Union, repeatedly primed in the instructions (France, Netherlands, United Kingdom), or (b) participants did not belong to the intergroup context at all (Bulgaria and Norway, non-E.U. members). Nonetheless, in most samples and in the aggregate, competition significantly correlated negatively with warmth.

### 3.5. Converging theory and evidence

A parallel effort to predict intergroup images from structural relations arises from enemy images in political psychology (Alexander *et al.*, 1999). Their taxonomy predicts that groups perceived as having incompatible goals (along with information about their status or power) lead to negative perceptions along the warmth dimension: hostile, untrustworthy, ruthless, evil. Low status and power lead to perceived lack of competence and some degree of warmth. Alexander and colleagues' parsing of the dimensions differs from ours, as they separate status and power (whereas our model presumes that these two typically go together), as well as goal compatibility (which corresponds to interdependence in the SCM). Thus, image theory creates the possibility of a  $2 \times 2 \times 2$  taxonomy of group images, though Alexander *et al.* (1999) focuses on four cells. Image theory and the SCM overlap, independently providing converging predictions about how structural variables affect stereotyping. Although we would argue that the SCM has advantages over image theory,<sup>1</sup> the two theories agree about how two social structural variables—status and competition—predict outgroup images, and image theorists' research has added supporting evidence for these predictions.

Although labeled differently, as noted earlier, gender stereotypes have distinguished stereotypically feminine communal traits (matching the warmth dimension) from stereotypically masculine agentic traits (matching the competence dimension). Social role theory (Eagly, 1987; Eagly *et al.*, 2000) posits that gender stereotypes follow from social structure, specifically from a gendered division of labor: homemakers versus employees, as well as sex-typed distribution in paid occupations corresponding to high-status

<sup>1</sup> Our model differs from image theory because the SCM (a) distinguishes warmth and competence as fundamental dimensions of stereotype content, (b) addresses how the attribution of positive traits can reinforce some types of prejudice (e.g., perceived competence can be integral to feelings of envy and resentment), (c) integrates predictions about stereotypes, emotions, and behaviors, and (d) encompasses its predictions in a more parsimonious  $2 \times 2$  model of stereotyping.

versus low-status roles. Social role theory holds that perceivers infer traits by observing role-constrained behavior, so when groups tend to be concentrated in certain roles, they receive the stereotypes that follow from those roles. As roles shift, gender stereotypes should too (Diekmann and Eagly, 2000). In a fictional portrayal of “city workers” and “child raisers,” role-based stereotypes mimicked gender stereotypes, perhaps rationalizing the distribution of the sexes into social roles (Hoffman and Hurst, 1990). Although social role theory provides a more detailed level of analysis linked to specific roles, we view this framework as compatible with the SCM’s broader approach. Note that the traditional gendered division of labor is organized to be interdependent (women relying on men as providers and men on women as homemakers) and status-driven (men’s roles having higher status and women’s lower status). Thus, social role theory’s more detailed analysis of how social structure affects gender stereotypes and the contents of those stereotypes can be viewed as complementary to the SCM.

### 3.5.1. Summary

Social structural variables, competitive-cooperative interdependence and status, respectively predict warmth and competence stereotypes, across a range of targets, respondents, and paradigms. Although the status-competence effects are larger (rivaling reliability coefficients), and the competition-warmth effects are moderate to small, both are reliable. Moreover, correlational data are supplemented by experimental data and parallel findings from related theories.



## 4. EMOTIONAL, BEHAVIORAL, AND ATTRIBUTIONAL CONSEQUENCES

Moving from antecedents to consequences, how do warmth and competence judgments affect how targets are treated? This section focuses on the impact of stereotypes along these fundamental dimensions. We propose that perceptions of high versus low warmth and competence elicit predictable, differentiated patterns of social emotions, behaviors, and attributions. Prior research and theory, dominated by a view of prejudice as a univalent antipathy, has obscured these distinctive patterns and their social consequences, especially for groups that receive ambivalent stereotypes.

### 4.1. Prejudiced emotions: Admiration, contempt, envy, and pity

#### 4.1.1. Emotions hypotheses

Drawing on varied literatures, we review both correlational and experimental evidence that the four combinations of high versus low warmth and competence judgments create four unique emotional responses: admiration,

contempt, envy, and pity (Cuddy *et al.*, 2004, 2007; Fiske *et al.*, 2002a,b). Our predictions build on social comparison-based (Smith, 2000) and attributional (e.g., Weiner, 2005) models of emotion. At the two extremes (a) upward assimilative social comparisons—to people perceived as warm and competent (e.g., ingroups)—elicit admiration and pride (Fiske *et al.*, 2002a) and (b) downward contrastive comparisons—to people perceived as incompetent and cold—elicit contempt and disgust (e.g., poor people; Fiske *et al.*, 2002a; Dijker *et al.*, 1996b). In the worst cases, these latter outgroups are severely dehumanized (Harris and Fiske, 2006).

The two ambivalent cases include (c) upward contrastive comparisons—to people perceived as competent but not warm (e.g., Asians; Fiske *et al.*, 2002b; Lin *et al.*, 2005; e.g., Jews; Fiske *et al.*, 2002b; Glick, 2002, 2005)—elicit envy and (d) downward assimilative comparisons—to people perceived as warm but not competent—elicit pity (e.g., the elderly; Cuddy *et al.*, 2005; Fiske *et al.*, 2002b). We address each quadrant in turn, focusing on the emotions.

**4.1.1.1. Pity** Low-status, noncompetitive groups seen as incompetent but warm receive paternalistic prejudice. As we have noted, exemplars of this cluster include elderly people, disabled people, retarded people, and housewives. These groups elicit pity and sympathy which is directed toward people with negative outcomes, whose causes they cannot control (Weiner, 1980, 1985).

Physical disabilities (e.g., Alzheimer's disease, blindness, cancer, heart disease, paraplegia) are perceived as onset-uncontrollable and worthy of sympathy and pity (Weiner *et al.*, 1988). When asked to describe times they pitied others, students' stories most often referred to people with physical disabilities or victims of environmental circumstances (Weiner *et al.*, 1982). Thus, only when poverty is attributed to external and uncontrollable societal causes does it evoke pity (Zucker and Weiner, 1993). A variety of stigmatizing conditions—blindness, cancer, AIDS, drug abuse, obesity, and homelessness—all can elicit pity when viewed as onset uncontrollable (Rush, 1998). But some of these are more typically viewed as onset controllable (AIDS, drug abuse, obesity, homelessness), compared to others (blindness, cancer). Viewing persons with AIDS as behaviorally responsible for their condition, for example, reduces pity (Dijker *et al.*, 1996a). Generally, physical stigmas are viewed as onset uncontrollable, eliciting pity, whereas mental-behavioral stigmas are viewed as onset-controllable, failing to elicit pity (Stipek *et al.*, 1989; Weiner *et al.*, 1988).

Drawing on Weiner's attributional analysis, Smith's (2000) theory of social comparison-based emotions describes sympathy and pity as downward assimilative emotions, directed at lower-status groups (as the SCM predicts). The SCM adds the insight that only noncompeting groups are sufficiently "assimilated" into society to evoke sympathetic concern.

We have described pity as paternalistic because it presumes that the perceiver has a dominant, though custodial, role. Paternalism implies subjectively positive emotions directed toward less fortunate or lower status others. Only low-status groups that are viewed as having positive intentions (i.e., are cooperative rather than competitive), however, are likely to elicit paternalism due to the perception that their poor outcomes are outside their control (because of their assumed incompetence). Their cooperativeness casts them as warm, with positive intentions, implying that they would surmount their predicament, if they were able (i.e., are not intentionally “parasitic”). In sum, LC–HW people are viewed as deserving pity and sympathy for uncontrollable negative outcomes that occur despite their best intentions.

**4.1.1.2. Envy** Competent but cold groups elicit envy and jealousy, a response we label envious prejudice. The positive side of envious ambivalence is that such groups are perceived as competent and therefore responsible for their own high status. On the negative side, they are viewed as competitors who lack warmth and have hostile intent. When others’ controllable, positive outcomes deprive the self, people feel envy (i.e., envy occurs when one lacks another’s superior, desired outcome; Parrott and Smith, 1993). Envy is by definition, then, directed upward. Moreover, envy generates dislike. Thus, upward contrastive (i.e., competitive) social comparisons elicit envy and resentment (Smith, 2000). Envy focuses on oneself and the other simultaneously, as a comparison in which the self is at a disadvantage.

Envy entails hostility and depression (Smith *et al.*, 1994); the hostility expresses feelings that the outgroup’s superior position is illegitimate, whereas the depression focuses on one’s own inferiority. Because acknowledging envy implies one’s own lack, this emotion is often couched as righteous indignation of the other’s presumably illegitimate gain (Smith, 1991). Thus, although envied groups may also elicit anger under certain conditions (discussed below, section 4.2.2.), anger is not uniquely expressed toward such high-status groups (because it also can be directed downward, toward low-status, competitor groups). In short, envy seems the more appropriate label for attitudes toward high-status, competitive groups than anger or resentment. However, envy in intergroup perceptions may be particularly difficult to measure (Spears and Leach, 2004); people are loath to admit envy because it implies a deficit in the self or ingroup.

**4.1.1.3. Contempt** The third combination, low-status, “free-loading” groups perceived as incompetent and not warm, receive what we have termed contemptuous prejudice. Groups that elicit such univalent antipathy evoke anger, contempt, disgust, hate, and resentment. Anger is directed toward those whose negative outcomes are perceived as their own fault

(Weiner, 1985) and who are viewed as a drain on the rest of society. For example, because conservatives attribute poverty to internal and controllable individual causes, they are more likely to react with blame and anger (Zucker and Weiner, 1993). Dijker's (1987) and Dijker *et al.*'s (1996b) work on native Dutch perceptions of Surinamese versus Turkish or Moroccan immigrants illustrates this link. The Dutch are more likely to feel contempt (in Dijker's measures this emotional dimension is defined as anger, annoyance, aversion, contempt, and antipathy) toward people of Turkish and Moroccan descent in the Netherlands than toward other minorities. Both Turks and Moroccans tend to be Muslims who to perform low-wage jobs. Their cultural differences (religious beliefs) and status (low-status jobs) are both viewed as choices rather than uncontrollable circumstances.

Similarly, voluntary unemployment and poverty caused by gambling elicit anger (Weiner *et al.*, 1982). As other examples, child abuse, drug addiction, obesity, and AIDS are seen as controllable, blameworthy stigmas, eliciting a high degree of anger (Weiner *et al.*, 1988). People who view homosexuality as both immoral and individually controllable react with anger and contempt to individuals with AIDS (Dijker *et al.*, 1996a). When homelessness is attributed to presumably controllable behaviors or traits, such as drug abuse or laziness, it likewise elicits 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).

Again, although anger is relevant, contemptuous prejudice involves more specific emotions, such as disgust and a moralistic resentment that includes overtones of injustice and indignation, bitterness toward illegitimate behavior. Injustice powerfully evokes both anger and disgust toward behavior viewed as immoral and as impeding one's own (or the ingroup's) goals and plans (Mikula *et al.*, 1998). Outgroups perceived to have interests that detract from ingroups create competition in a zero-sum sense, inciting anger, but contempt and disgust are downward (i.e., target lower status others) contrastive comparisons (Smith, 2000). Anger, contempt, and disgust all express moral outrage, though at different levels—individual, community, and divinity, respectively (Rozin *et al.*, 1999). Violations of individual standards elicit anger; violations of community standards evoke contempt; and violations of divine standards provoke disgust. Groups perceived as low-status, competitive free-loaders with hostile and exploitative intent that impacts others as individuals, as communities, and as religious believers, elicit strong morally justified contempt.

**4.1.1.4. *Admiration*** Some groups with high status do not compete with societal ingroups, either because they are dominant, mainstream ingroups and reference groups or their close allies. Because they have high status but also serve as societal reference groups or further the interests of such groups, they elicit admiration and pride. For example, most Americans identify as

middle class or aspire to be, so the middle class serves as a societal reference group. These reference groups, receiving univalent positive regard, elicit pride, admiration, and respect. 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 self, and by extension, to one's group or reference group.

People indeed feel positive about the successes of close others, as long as others' success in a domain, because of its relevance to self-esteem, does not create an unfavorable comparison for 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 one basks in the reflected glory of a group's (e.g., a team one supports) success (Cialdini *et al.*, 1976). Thus, upward, assimilative social comparisons elicit admiration and inspiration, according to Smith's (2000) theory. Pride and admiration should therefore be directed toward successful ingroups, reference groups, and close allies.

**4.1.1.5. Summary** The SCM's emotional prejudice hypotheses state that: pity targets low-status, noncompetitive groups seen as warm but incompetent, envy targets high-status, competitive groups seen as competent but cold, contempt targets low-status groups seen as competitive (free-loading), and admiration targets mainstream reference groups—high-status, noncompetitive—seen as warm and competent.

#### **4.1.2. Support for emotions hypotheses: Correlational and experimental**

**4.1.2.1. Correlational evidence** In several US studies, the groups rated in our stereotype content surveys (Cuddy *et al.*, 2007, Study 1; Fiske *et al.*, 2002b, Study 4) were also rated on emotion items assessing admiration (admiring, inspired, proud, respectful), contempt (contemptuous, disgusted, hateful, resentful), envy (envious, jealous), and pity (pity, sympathy). Participants received instructions similar to those used in assessing stereotypes, reporting the emotions that people in (e.g., American) society generally feel toward each group.

The correlational studies found that emotion ratings differed as predicted within each of the four warmth–competence clusters. The cold–competent cluster (e.g., Asians, Jewish people, and rich people) elicit envy and moderate admiration, but little contempt or pity. Warm–incompetent groups (e.g., disabled people, elderly people, and mentally retarded people) are pitied, receiving much less admiration and contempt, and no envy. The incompetent–cold cluster (e.g., homeless people, poor people, welfare recipients) evoke contempt, but little pity or admiration and no envy. Warm–competent groups (e.g., Americans, middle-class, and students) elicit

significantly more admiration and pride than any of the other three emotion factors.

Comparing the clusters within each emotion showed that each emotion's highest rating occurred for the predicted cluster: admiration was highest for the warm-competent cluster, envy was highest for the cold-competent cluster, pity was highest for the warm-incompetent cluster, and contempt was highest for the cold-incompetent cluster.

**4.1.2.2. Experimental evidence** We also conducted experimental tests of the intergroup emotions hypotheses (Caprariello *et al.*, 2007). In these experiments, we focused on whether the social structural variables—status and competitiveness—elicit the predicted emotions, investigating the claim that each combination of high and low status and competitiveness would actually bring about the predicted emotional responses.

In the fictitious immigrant group study described earlier, participants were also asked “When members of this ethnic group arrive, to what extent will people here be likely to feel each of the following emotions toward them?” and made ratings on the four emotions scales. The results supported three of four predictions. Members of low-competition, high-status groups elicited significantly more admiration and pride than members of all other groups. Members of high-status, high-competition groups evoked more envy than members of other groups. Likewise, members of low-competition, low-status groups garnered more pity and sympathy than other group members.

Contrary to predictions, however, members of high-competition, low-status groups did not evoke higher ratings of contempt and disgust compared to the other groups, and even evoked less contempt than members of high-competition/high-status groups *and* low-competition/low-status groups. The only group that elicited lower contempt ratings were members of low-competition/high-status groups (i.e., stand-ins for ingroups and reference groups), who evoked significantly less contempt than all other groups. Thus, although our prediction about which group would elicit the *most* contempt was not supported, we did find the low-competition/high-status group elicited the *least*. Participants gave mostly neutral ratings on contempt and disgust (closer to the midpoint than the other emotions), perhaps indicating reluctance to report contempt and disgust toward any group. This may reflect an unwillingness to indicate strong negative emotions toward others (Sears, 1989).

The null result for contempt ratings should, however, be placed in the context of other, more supportive data. First, the student samples and national representative sample survey (Cuddy *et al.*, 2007; Fiske *et al.*, 2002b) showed clear reports of disgust/contempt toward low-warmth, low-competence groups. Second, neuroimaging data show that these groups uniquely fail to elicit activation in the medial prefrontal cortex

(mPFC), an area that reliably responds to social stimuli. By contrast, low-warmth, low-competence groups do activate the insula, an area reliably implicated in disgust (Harris and Fiske, 2006). Together, these neuroimaging results suggest that these groups are viewed as less-than-human. Third, ratings of actual (as opposed to fictitious) immigrant groups perceived as low-status and exploitative (e.g., undocumented migrants) do elicit low-warmth and low-competence attributions (Lee and Fiske, 2006).

#### 4.1.3. Summary

Thus, experimental findings support the SCM's predictions that particular combinations of warmth and competence perceptions create distinct emotional reactions toward groups and individuals. In the intergroup context, this stands in sharp contrast to the presumption that intergroup emotions are typically univalent, either wholly positive (e.g., toward allied groups) or negative (toward outgroups). Understanding these distinct emotional profiles—admiration, envy, pity, and contempt—is of special importance for understanding intergroup behavior, to which we now turn.

### 4.2. Behaviors: Active and passive, facilitation and harm

The BIAS map (Cuddy *et al.*, 2007; Fig. 2.2) builds on the SCM, proposing that the four combinations of high versus low warmth and competence elicit not only differentiated emotions, but also four discrete patterns of behavioral responses: active facilitation (e.g., help), active harm (e.g., harassment), passive facilitation (e.g., convenient cooperation), and passive harm (e.g., neglect). We present both correlational and experimental support for these patterns for both intergroup (e.g., Cuddy *et al.*, 2004, 2007) and interpersonal (Asbrock and Cuddy, 2008) perception.

#### 4.2.1. Behaviors hypotheses

**4.2.1.1. Identifying dimensions of behaviors** Past work suggests that two dimensions capture a wide range of intergroup behaviors: active–passive concerns intensity; harm–facilitation concerns valence. The active–passive distinction runs through various areas of psychology, showing that behaviors tend to be enacted with relatively more or less effort, directness, engagement, intent, and intensity. This dimension distinguishes more overt and effortful social behaviors, whether positive or negative, such as helping or harassing, from more subtle types that involve less exertion, such as associating or neglecting. The active–passive dimension has been used to classify a range of interpersonal behavior, including aggression (Buss, 1961), romantic relationship behaviors (Sinclair and Fehr, 2005), leadership styles (Eagly *et al.*, 2003), and minority social influence (Kerr, 2002), among others. Ayduk *et al.* (2003) describe active behaviors as direct, explicit, overt, confrontational, intense, and high risk. By contrast, passive behaviors



are indirect, covert, less intense, and avoidant. "Passive" does not imply a completely inert state (which would make "passive behavior" an oxymoron); rather, in psychology, "passive" has often been used to describe behaviors that require less effort, direction, and intention (e.g., passive aggression) relative to behaviors that are unambiguously active and goal-directed (e.g. active aggression). Passive aggression, for example, includes neglecting to do something (e.g., warning someone of danger), whereby the omission then harms another person.

For the intergroup domain, we define active behaviors as those conducted with directed effort to affect the target group; they overtly and directly act for or against the target group. We define as passive behaviors those that are conducted or experienced with less directed effort, but still have repercussions for the outgroup; they act with or without the target group. Passive behaviors may reflect a less deliberate or obvious intention on the part of an actor to bring about a specific outcome, but can constitute consequential forms of discrimination (e.g., passive segregation, failure to hire members of a specific group, neglecting an outgroup member's welfare, not providing service). On the positive side, passive behaviors represent noncommittal rapprochement, as when prejudiced people cooperate with outgroups when convenient, "go along to get along," patronize businesses owned by disliked outgroups, or tolerate but neither object to nor endorse the outgroup's presence.

A second frequent distinction concerns the valence of behavior as determined by its intended effect on others. We refer to this second dimension as facilitation-harm. This dimension distinguishes prosocial/helping behavior from antisocial/aggressive behavior (see Batson, 1998 and Geen, 1998 for reviews). Similarly, interdependence theorists focus on how social behavior facilitates or impedes others' goals (e.g., Thibaut and Kelley, 1959). In the intergroup context, we define facilitation-harm as follows: facilitation leads to ostensibly favorable outcomes or gains for other groups; harm leads to detrimental outcomes or losses for other groups.

Combining the two behavioral dimensions creates four classes of behaviors, along two bipolar dimensions: *active facilitation* (i.e., acting for) explicitly aims to benefit a target. Interpersonally, these behaviors include helping, assisting, and defending others (e.g., opening a door for someone). At the intergroup level, this would include hiring, promoting, and befriending group members. Institutionally, these behaviors include assistance programs for the needy, corporate charitable giving, progressive tax codes, and anti-discrimination policies.

*Active harm* (i.e., acting against) explicitly intends to hurt a target and its interests. Individual insults, bullying, and attack are individual active harms. Using group epithets, sexual harassment, and hate crimes all constitute group-based active harm. Institutionally, active harm can range from discriminatory policies to legalized segregation to mass internment (e.g., Japanese Americans during World War II) to genocide.

*Passive facilitation* (i.e., acting with) accepts obligatory association or convenient cooperation with a target. Such behavior is passive because contact is not desired, but only tolerated in the service of other goals; facilitation of the other is a mere by-product. Interpersonal examples include tolerating obligatory association in educational, commercial, or professional settings, with people one would not otherwise choose as associates. Intergroup examples include hiring the services of outgroup members (e.g., as domestics) or choosing to work with members of a group assumed to be smart (e.g., Asian Americans) on a team project. Institutionally, realpolitik cooperation with a disliked regime illustrates passive facilitation. Passive facilitation acts with the group for one's own purposes, but simultaneously benefits the other group as a by-product.

*Passive harm* (i.e., acting without) demeans or distances others by diminishing their social worth through excluding, ignoring, or neglecting. Relational or social aggression (e.g., Crick and Grotpeter, 1995) and passive negative coping (e.g., withdrawal of social support; Ayduk *et al.*, 2003) are related concepts. Interpersonal passive harm includes avoiding eye contact, being dismissive, and ignoring another person. The same behaviors applied on the basis of outgroup membership would constitute intergroup passive harm. Institutionally, passive harm involves disregarding the needs of some groups (e.g., by denying assistance) or limiting access to necessary resources such as education, housing, and healthcare. Passive harm acts without the group, denying its existence, harming its members by omission of normal human recognition.

Three hypotheses specify how warmth-competence stereotypes and their corresponding social emotions might predict the four classes of behavioral tendencies.

**4.2.1.2. Warmth judgments elicit active behavioral responses** Because of its primacy in evaluations of others (as reviewed above), we hypothesized that the warmth dimension predicts the valence of active behaviors: perceivers act against (i.e., active harm) stereotypically cold groups and for (i.e., active facilitation) stereotypically warm groups. Warmth stereotypes theoretically derive from the inferred goals of the target group and the potential benefits or harms caused by these goals (Wojciszke, 2005a,b). The SCM supports this link, illustrating how competitive or exploitative groups (whose goals are perceived as harmful) are stereotyped as lacking warmth, whereas noncompetitive groups (perceived as not having harmful goals) are stereotyped as possessing warmth. Because it is self- and ingroup-relevant, warmth information dominates over competence information in person perception. As reviewed above, compared to competence, warmth accounts for twice as much of the variance in global evaluations of others, is chronically more accessible in descriptions of others, leads to stronger and more stable evaluations of others (Wojciszke *et al.*, 1998), and is identified and

judged more rapidly (Hack *et al.*, 2007; Ybarra *et al.*, 2001). Warmth information creates a relatively urgent need to react, leading to active facilitation directed at warm groups and active harm directed at cold groups.

**4.2.1.3. Competence judgments elicit passive behavioral responses** We hypothesized that competence, being secondary, although still important, in evaluations of others (as reviewed above), predicts the valence of passive behaviors: perceivers act without (i.e., passive harm) stereotypically incompetent groups and with (i.e., passive facilitation) stereotypically competent groups. Perceived competence theoretically derives from the inferred efficacy with which the target's goals are enacted (Wojciszke, 2005a,b). The SCM's parallel analysis shows that groups high in status (i.e., having resources or power to carry out goals) are stereotyped as competent, whereas low-status groups are stereotyped as lacking competence. In contrast to the exigency of warmth information in person perception, the competence or incompetence of the other is less pressing because it is less self- and ingroup-relevant (Wojciszke *et al.*, 1998). Although competence still contributes significantly, albeit less, to the overall variance in global evaluations of others, it contributes significantly less than compared to warmth, and it is chronically less accessible in descriptions of others. It leads to weaker and less stable evaluations of others (Wojciszke *et al.*, 1998), and is identified and judged more slowly than warmth (Hack *et al.*, 2007; Ybarra *et al.*, 2001).

The rationale that competence is less pressing than warmth might seem to imply that behavioral responses would be simply weaker, not specifically passive. We hypothesized that competence leads to passivity specifically because competence (and its structural cause, status) imply control over desired resources. Those with status and resources attract others who hope to share some of that status, competence, or resource by proximity or association. Those groups lacking status, competence, and resources will be ignored and neglected because they have nothing to offer. Thus, inferred competence, although still important in perception of others, does not create as immediate a need to react, thus cuing more passive behaviors, which involve acting with (i.e., passive facilitation) or without (i.e., passive harm) others.

**4.2.1.3.1. Summary** The first hypothesis states that the warmth dimension of stereotypes will predict the valence (i.e., facilitation versus harm) of active behaviors, and the competence dimension of stereotypes will predict the valence of passive behaviors. Specifically, we predict that warmth stereotypes will elicit active facilitation (e.g., helping) and prevent active harm (e.g., attacking), while competence stereotypes will elicit passive facilitation (e.g., associating with) and prevent passive harm (e.g., excluding). Each combination of warmth and competence stereotypes thus relates to a distinct pattern of behavioral tendencies (see Fig. 2.2).

**4.2.1.4. Each emotion predicts a unique pattern of behaviors** Although judgments of both warmth and competence (cognitions) and emotions affect behaviors, we have suggested that, consistent with past work reviewed earlier in this chapter, emotions more strongly and directly relate to behavior. Assuming that cognitions cue behaviors and emotions activate them (Frijda *et al.*, 1989), we hypothesized that the specific emotion linked to each SCM combination of warmth-competence stereotypes will also predict the hypothesized behavioral tendencies. A distinct emotion links to each combination of high-low warmth-competence stereotypes (Fiske *et al.*, 2002b, Study 4); we hypothesized that two emotions will predict each behavioral tendency. These specific links are supported by already reviewed theories that conceptualize discrete emotions as outcomes of social comparisons (e.g., Smith, 2000), outcome attributions (e.g., Weiner, 2005), and cognitive appraisals (e.g., Dijker *et al.*, 1996b; Mackie *et al.*, 2000). Figure 2.2 depicts the BIAS map hypotheses.

**4.2.1.4.1. Pity (low-competence/high-warmth)** Pity is an ambivalent emotion—comprising both compassion, but also sadness and an implicit sense of superiority over the other—that results from appraising another’s negative outcome as unintentional and uncontrollable (Weiner, 2005). Pity elicits active facilitation and passive harm. Active facilitation includes helping elicited by pity (Weiner, 2005). However, to avoid the sadness and depression pity evokes, people may avoid and psychologically distance themselves from unfortunate others. Thus, pity does not always activate help, but can lead to avoidance and neglect, such as turning off an appeal to aid starving children (Green and Sedikides, 1999; Roseman *et al.*, 1994). Pity implicitly involves condescension (i.e., disrespect) and can therefore lead to dismissive behaviors, such as the patronizing speech and poor medical treatment often afforded to elderly people (e.g., Pasupathi and Lockenhoff, 2002). We hypothesized that pity elicits active facilitation (i.e., actively acting for) and passive harm (i.e., passively acting without).

**4.2.1.4.2. Envy (high-competence/low-warmth)** Envy covets another’s superior outcome and comprises feelings of injustice or inferiority (Smith *et al.*, 1994). Envy is ambivalent, involving both resentment and respect. We hypothesized that envy cues both passive facilitation under normal conditions and active harm when a society is stressed. Because envy implicitly acknowledges that another group has outdone the ingroup, it cues convenient cooperation that might enable the ingroup to acquire some of the coveted outcome. Envy involves begrudging admiration for the other, an ambivalent type of respect that might produce passive facilitation. However, when societies experience widespread misfortunes and instability, envied groups are likely to be scapegoated because they are perceived to have ability (competence) as well as intent to disrupt society (Glick, 2005;

Staub, 1996). Scapegoating can then lead to extremely hostile acts against the envied group, including “ethnic cleansing” and genocide. We hypothesized that envy elicits passive facilitation (i.e., passively acting with) and active harm (actively acting against).

**4.2.1.4.3. Contempt (low-competence/low-warmth)** Contempt and disgust targets those with negative outcomes perceived as onset-controllable (Weiner, 2005) and who are viewed as a drain on valuable resources. We hypothesized that contempt cues both active and passive harm. Contempt-related emotions elicit passively harmful actions such as demeaning, condescending behaviors (Brewer and Alexander, 2002); neglect (Weiner, 2005); and distancing, excluding, or rejecting (Roseman *et al.*, 1994; Rozin *et al.*, 1999). Disgust also motivates attempts to remove a noxious stimulus from one’s perceptual field, eliciting the desire to forcefully expel or obliterate the stimulus (Plutchik, 1980; Roseman *et al.*, 1994). We hypothesized that contempt elicits both active harm (i.e., actively acting against) and passive harm (i.e., passively acting without).

**4.2.1.4.4. Admiration (high-competence/high-warmth)** Admiration and pride target successful others whose positive outcomes either do not detract from or enhance the self (Tesser and Collins, 1988). We hypothesized that admiration leads to both active and passive facilitation. Admiration and pride motivate contact (Dijker *et al.*, 1996b) and relate to cooperation (Alexander *et al.*, 1999); happiness, a linked emotion, predicts positive approach behaviors (Neuberg and Cottrell, 2002). We hypothesized that admiration elicits active facilitation (i.e., actively acting for) and passive facilitation (passively acting with).

**4.2.1.5. Bias clusters** The SCM and BIAS hypotheses imply coordinated “bias clusters” of specific stereotypes, distinct emotions, and pairs of behavioral tendencies. Further, if the specific hypothesized links are supported, ambivalent bias clusters should emerge: groups with ambivalent warmth-competence stereotypes (i.e., high on one dimension, low on the other), and ambivalent emotions (i.e., envy, pity) will be targets of ambivalent patterns of intergroup behaviors—one facilitation behavior and one harm behavior. We predict that high-competence/low-warmth stereotypes will link to passive facilitation and active harm, and low-competence/high-warmth stereotypes will link to active facilitation and passive harm (see Fig. 2.2).

Consistent with the third principle presented earlier—that emotions more strongly and directly predict behaviors—the BIAS map also predicts that the relationship between emotions and behavioral tendencies will be stronger than the relationship between stereotypes and behavioral tendencies, and emotions will mediate the stereotypes → behaviors relationship.

#### 4.2.2. Support for behaviors hypotheses: Correlational and experimental

**4.2.2.1. Correlational results** The behavior hypotheses were tested by Cuddy *et al.* (2007) using behavior scales developed in a preliminary study with students. Study 1 used a representative national sample, collected via a random-digit dialing telephone survey ( $N = 571$ , 62% female, average age = 43.5) of English-speaking adults, 18 or older, in the 48 contiguous United States. Data were weighted on gender, age, education, census region, and race-ethnicity to match U.S. Census Bureau estimates. The phone survey listed 20 US social groups, chosen from previous studies (Fiske *et al.*, 1999, 2002b; Katz and Braly, 1933), with five groups likely to represent each of the four quadrants of the warmth-competence space.

Each participant rated 4 of the 20 groups (1 group randomly chosen from each of the predicted quadrants), using scales that tapped perceptions of competitiveness and status (social structure); warmth and competence (stereotypes) admiration, contempt, envy, and pity (emotions); and the four types of behaviors—active harm, passive harm, active facilitation, and passive facilitation. All but the behavioral tendencies scales were adapted from previous research, and each scale included the two items with the highest average factor loadings across previous studies (Fiske *et al.*, 1999, 2002b). The four behavioral tendencies scales were developed based on data from a preliminary study: attack, fight (active harm); exclude, demean (passive harm); help, protect (active facilitation); and cooperate with, associate with (passive facilitation). Using 5-point scales (1 = *not at all*; 5 = *extremely*), participants rated how the groups “are perceived [treated] by Americans.” As before, this instruction was intended to assess perceived societal reactions and to reduce participants’ social desirability concerns.

**4.2.2.1.1. Stereotypes → Behaviors** Results of our national sample survey document four hypothesized patterns of discriminatory behavioral tendencies, based on warmth-competence stereotypes and related emotions. As expected, warmth ratings correlated positively with active facilitation and negatively with active harm. Competence ratings correlated positively with passive facilitation and negatively with passive harm (absolute values ranged from .55 to .77 at the group level of analysis and from .34 to .64 at the individual level; see Table 2.4).

We also examined the stereotypes → behaviors hypothesis by comparing behavioral intentions toward groups in the high-warmth versus low-warmth clusters, and groups in the high-competence versus low-competence clusters. These, too, supported our predictions (see Table 2.5). Groups stereotyped as possessing warmth elicited more active facilitation and less active harm than groups stereotyped as lacking warmth. Groups stereotyped as competent elicited more passive facilitation and less passive harm than groups stereotyped as lacking competence.

**Table 2.4** Correlations of behavioral tendencies with stereotypes and emotions (Study 1)

Predictor	Behavioral tendency			
	Active facilitation	Active harm	Passive facilitation	Passive harm
Stereotypes (group-level)				
Competence	.08	-.20	<b>.77***</b>	-.68***
Warmth	<b>.73***</b>	-.55***	.45*	-.24
Emotions (group-level)				
Admiration	<b>.59**</b>	-.35	<b>.95** *</b>	-.69**
Contempt	-.63**	<b>.93***</b>	-.46*	<b>.48*</b>
Envy	-.06	<b>.22</b>	<b>.57**</b>	-.39
Pity	<b>.51*</b>	-.10	-.48*	.65**
Stereotypes (participant-level)				
Competence	.17***	-.10**	<b>.64***</b>	-.50***
Warmth	<b>.47***</b>	-.34***	.53***	-.24***
Emotions (participant-level)				
Admiration	<b>.49***</b>	.31***	<b>.74***</b>	-.58***
Contempt	-.24***	<b>.54***</b>	-.33***	<b>.48***</b>
Envy	.00	<b>.21***</b>	<b>.43***</b>	-.25***
Pity	<b>.40***</b>	.00	-.26***	<b>.41***</b>

\*  $p < .05$ .\*\*  $p < .01$ .\*\*\*  $p < .001$ .

Note: Bolded correlations were predicted to be significant (23/24 were). But 15/24 others were also significant; although they were theoretically consistent, most appeared in the participant-level analyses, which had especially high power (participant d.f. = 569, group d.f. = 18).

**4.2.2.1.2. Emotions → Behaviors** The national phone survey study also supported the hypothesized relationships between specific positive and negative social emotions (admiration, contempt, envy, and pity) and unique patterns of intergroup behavioral intentions. Correlational data strongly supported seven of eight of the specific predicted links. Although the envy to active harm link was significant only at the individual level, but not at the group level, subsequent analyses clarified that envy operates via anger to predict behavior (see below). At a minimum, the four combinations of warmth-competence stereotypes formed distinct bias clusters, linking with predicted patterns of emotions and behavioral tendencies, including the hypothesized ambivalent clusters. Groups stereotyped as high on competence but low on warmth elicited envy and passive facilitation but active harm. Groups stereotyped as low on competence but high on warmth, on the other hand, elicited pity and active facilitation but passive harm.

Consistent with previous research (e.g., Dovidio *et al.*, 1996; Talaska *et al.*, 2007), emotions tended to more strongly and directly predict

**Table 2.5 Behavioral tendencies standardized means (and standard deviations) by competence and warmth stereotypes (Cuddy *et al.*, 2007, Studies 1 and 2)**

	Warmth		Competence	
	High	Low	High	Low
Study 1 (measured stereotypes)				
Active facilitation	.331 <sub>a</sub> (.82)	-.350 <sub>b</sub> (.61)	.277 <sub>a</sub> (.51)	-.333 <sub>b</sub> (.80)
Active harm	-.305 <sub>b</sub> (.78)	.323 <sub>a</sub> (.91)	-.270 <sub>b</sub> (.72)	.318 <sub>a</sub> (.80)
Study 2 (manipulated stereotypes)				
Active facilitation	.352 <sub>a</sub> (.98)	-.371 <sub>b</sub> (.89)	.345 <sub>a</sub> (.89)	-.352 <sub>b</sub> (.99)
Active harm	-.325 <sub>b</sub> (.97)	.343 <sub>a</sub> (.92)	-.310 <sub>b</sub> (.98)	.292 <sub>a</sub> (.93)

*Note:* Within study, within trait (i.e., warmth, competence), means not sharing a subscript differ at  $p < .01$ . All predicted differences are significant.



behavioral tendencies than did stereotypes. Following an appraisal → emotion → behavior sequence (e.g., Mackie *et al.*, 2000), for each behavioral tendency, at least one emotion mediated the stereotype → behavior link. However, some emotions took priority over others. Admiration fully mediated the relationship between warmth stereotypes and active facilitation, and partially mediated the relationship between competence stereotypes and passive facilitation. Contempt fully mediated the relationship between warmth and active harm, and pity fully mediated the relationship between competence stereotypes and passive harm.

Only envy did not mediate any relationships of stereotypes to behavioral tendencies, which led us to conduct a second correlational study to better understand its predicted link to active harm (Cuddy *et al.*, 2007, Study 4). Intergroup envy may elicit active harm only when a society is under great stress and heightened intergroup competition (Glick, 2002, 2005; Staub, 1996). For example, the Nazis viewed Jews as powerful, competent manipulators who had engineered Germany's defeat in World War I and the subsequent economic crisis. In Rwanda, the Tutsi, also a high-status minority, were similarly blamed for the nation's economic problems. Active harm (at its most extreme, genocidal attack) can be justified and motivated when an outgroup is viewed as a powerful, capable competitor or exploiter discussed in greater detail below, section 5.2.). We therefore hypothesized that anger, which can be sometimes elicited by the circumstances just described and which leads to offensive actions toward others (e.g., Mackie *et al.*, 2000), would mediate the link between envy and active harm. Participants in this study rated a shorter list of groups on the four SCM emotions scales (admiration, contempt, envy, pity) in addition to two new scales measuring anger and fear. As expected, anger fully mediated the link from envy to active harm.

**4.2.2.2. Experimental results: Intergroup and interpersonal** To test proposed causal links to behaviors, we conducted experiments of both intergroup (Cuddy *et al.*, 2007) and interpersonal (Cuddy, unpublished data) perception and behavioral intentions.

**4.2.2.2.1. Intergroup** We conducted two experiments that varied perceived stereotypes and emotions toward a fictitious immigrant group (adapted from Caprariello *et al.*, 2007) and assessed behavioral intentions (on scales similar to those used in the national phone survey). Both using student samples, one experiment varied warmth and competence stereotypes (Cuddy *et al.*, 2007, Study 2) and the other varied emotions elicited by the group (Cuddy *et al.*, 2007, Study 3).

Data from the first experiment strongly supported causal links between warmth and competence stereotypes and, respectively, active and passive behavioral tendencies, perfectly replicating the pattern seen in the phone survey data. Stereotypically warm groups elicited more active facilitation

and less active harm than stereotypically cold groups, regardless of stereotypic competence. Stereotypically competent groups elicited more passive facilitation and less passive harm than stereotypically incompetent groups (stereotyped as lacking competence), regardless of stereotypic warmth. Table 2.5 presents results of this experiment alongside results from the phone survey. These results fit the general notion that cognitive appraisals predict action tendencies (Mackie *et al.*, 2000), but are tailored to the BIAS map's two-dimensional space.

Findings from the second experiment also clearly supported the hypothesized causal links between the typical emotion said to be aroused by the group and behavioral tendencies toward that group, also replicating the four different patterns of behavioral tendencies documented in the national phone survey. Active facilitation was higher for admired and pitied groups, compared with envied and hated groups, who elicited higher active harm. Passive facilitation was higher for admired and envied groups, compared with hated and pitied groups, who elicited higher passive harm. Effect sizes for the ambivalent emotions, envy and pity, were smaller than effect sizes for the univalent emotions, admiration and contempt, but all significantly followed the hypothesized patterns.

**4.2.2.2.2. *Interpersonal*** In another experiment using a scenario design (Asbrock and Cuddy, 2008), we asked participants to imagine the following:

You are taking a fairly small (i.e., fewer than 30 students) upper-level course in your major. In this course, 60% of your final grade will be determined by your score on a joint project with another student. The project involves conducting research and writing a 20–25-page report of your findings. You cannot choose your partner; the professor makes the assignments.

The next sentence, which included the warmth and competence manipulations, read:

The person assigned to work with you is clearly one of the smartest (or least smart) and most competent (or incompetent) students in the class, and (or but), is also friendly (or unfriendly) and warm (or cold) toward other students.

Then we asked participants:

Try to imagine how your interactions with this person would unfold as you work to finish the project. Please rate how likely it is that you would behave in each of the following ways toward your partner.

Using a 5-point scale from “not at all likely” to “very likely,” participants made ratings on a series of behaviors, which tapped all four categories of BIAS map behaviors. Active facilitation items were “share notes with partner” and “do more work to help my partner.” Active harm items were “take undue credit for my partner’s work” and “tell my professor (i.e., tattle)

if I don't think my partner is doing his or her share." Passive facilitation items were, "accept my partner's ideas" and "take my partner's ideas seriously." Passive harm items were "avoid meeting with my partner," and "dismiss my partner's ideas."

Replicating the intergroup findings, competence affected the passive, but not the active behaviors. Participants endorsed higher passive facilitation and lower passive harm for competent partners than for incompetent partners. Participants also endorsed higher active facilitation and lower active harm for warm partners than for cold partners.

#### 4.2.3. Summary

The BIAS map hypotheses concern how specific combinations of warmth and competence stereotypes plus the distinct associated emotions give rise to distinctive patterns of behavior toward groups. These findings also appear to generalize to individuals who are characterized on warmth and competence traits. As predicted, two types of groups (those that are uniformly high or uniformly low on both warmth and competence) arouse consistent behavioral tendencies (i.e., both active and passive facilitation or active and passive harm). By contrast, groups that are stereotyped ambivalently arouse conflicting behavioral tendencies, such as the passive facilitation but active harm elicited by envied groups or the active facilitation but passive harm elicited by pitied groups. Research thus far has generally supported the predicted links, as well as the hypothesis that emotions mediate the effects of warmth and competence stereotypes, and therefore exert a stronger and more direct influence on behavior. However, more research is needed on the moderators that determine when ambivalently stereotyped groups elicit facilitative versus harmful behavior. Because envious and pitying prejudices (the ambivalence specified by the SCM) entail a more complicated pattern of responses and have previously received less attention, the next section focuses more closely on these two types of bias.

## 5. SPOTLIGHT ON AMBIVALENT COMBINATIONS: WARM-INCOMPETENT AND COMPETENT-COLD

A unique feature of our work is its focus on ambivalent combinations of warmth and competence judgments—competent and cold, and warm and incompetent. Our research has demonstrated that groups with ambivalent warmth-competence stereotypes elicit both ambivalent emotions (Cuddy *et al.*, in press; Fiske *et al.*, 2002b) and ambivalent behavioral responses (Cuddy *et al.*, 2007). We discuss findings concerning both types

of ambivalent prejudice, pitying and envious, in greater detail and then apply these insights to interpersonal perception.

### 5.1. Pitying prejudice: Warm but incompetent

In this section, we give a more detailed analysis of the two types of pitying, paternalistic prejudice that have received the most research attention: ageism and sexism toward traditional types of women. Both of these prejudices are prevalent and appear to generalize across cultures (despite past belief that ageist paternalism might be a uniquely Western phenomenon).

#### 5.1.1. Older people

Strong evidence suggests that the global category “elderly people” falls squarely into the warm and incompetent cluster of stereotyped groups (Cuddy *et al.*, 2005; Fiske *et al.*, 1999, 2002b; Heckhausen *et al.*, 1989; Hummert *et al.*, 2002; Kite *et al.*, 1991). In the correlational studies (Cuddy *et al.*, 2007; Fiske *et al.*, 1999, 2002b), elderly people reliably fell into the warm–incompetent cluster, alongside disabled and retarded people; the group was rated as less competent (see scale items above) than 18 of 24 groups and warmer than 22 of 24 groups (see Fig. 2.1). Competence ratings averaged only 2.63 out of 5 (below the scale mid point), and warmth ratings averaged 3.78 (well above the scale mid point). The two scores differed significantly from each other in all samples. As predicted, participants most endorsed items reflecting paternalistic prejudice (pity and sympathy) and least endorsed emotions reflecting envious prejudice (envy and jealousy) toward elderly people.

Other researchers have also found that older people are viewed as possessing far fewer competence than warmth traits. Compared to younger people, older people are rated as warmer and friendlier, but also as less ambitious, less responsible (Andreoletti *et al.*, 2001), and less intellectually competent (Rubin and Brown, 1975). When Kite *et al.* (1991) asked people for their perceptions of young and old women and men, they found that age stereotypes trumped gender stereotypes; regardless of gender, older people were rated as more feminine (i.e., warm) and less masculine (i.e., competent) than younger people. People attribute memory failures of older adults to intellectual incompetence and memory failures of younger adults to lack of attention or effort (Erber and Prager, 1999; Erber *et al.*, 1992, 1993, 1996). In a study of perceptions of life span development, participants predicted that competence-related traits (independent, industrious, intelligent, productive, self-confident, smart) were likely to be lost about nine years earlier (age 72.3) than warmth-related traits (affectionate, friendly, good-natured, kind, trustworthy; age 81.3), a significant difference (Heckhausen *et al.*, 1989). Finally, several studies have uncovered incompetence stereotypes of older people in

the workplace; older employees are believed to be less effective than younger employees in various job-related tasks (Avolio and Barrett, 1987; Rosen and Jerdee, 1976a,b; Singer, 1986). These stereotypes persist even though several studies show that older employees exhibit at least as much, and sometimes more, competence on the job compared to younger employees (McCann and Giles, 2002).

There is some reason to believe East Asian collectivistic cultures may be less ageist, given their greater emphasis on filial piety, which is deeply rooted in the Confucian teachings that helped shape some East Asian cultures (Sung, 2001). Our own cross-cultural data (reviewed above) repudiate the assumption that Westerners stand alone in their perception of elderly people as sweet and feeble (Cuddy *et al.*, in press). In all of the samples that rated “elderly people” (Belgium, Costa Rica, Hong Kong, Japan, Israel-Jewish, Israel-Muslim, South Korea), participants viewed them as significantly more warm than competent. Most interestingly, in our three most collectivistic samples—Hong Kong, Japan, and South Korea—this pattern held up, with (a) elderly warmth being significantly higher than elderly competence in all samples, and (b) elderly warmth being significantly higher than the respective overall warmth means and significantly lower than the respective overall competence means. As expected and consistent with the SCM, elderly people were viewed as low status and noncompetitive.

Pancultural ageism has been documented in other lines of research, as well. Harwood and colleagues (1996) surveyed participants in six nations, asking people to identify traits they associate with elderly people. Factor analysis uncovered two main dimensions—personal vitality (competence) and benevolence (warmth). Across samples, elderly people were rated as significantly higher on benevolence than on personal vitality. Moreover, the authors were surprised to find that East Asian participants, specifically Hong Kong residents, reported generally negative evaluations of elderly people. In other cross-cultural investigations, participants in China (Tien-Hyatt, 1986/87), Japan (Koyano, 1989), Taiwan (Tien-Hyatt, 1986/87), and Thailand (Sharps *et al.*, 1998) reported even more negative attitudes about older people’s incompetence than their American counterparts. In short, there is mounting evidence that ageism is pancultural.

Moreover, the elderly stereotype seems to be somewhat intractable. One study manipulated the competence of an elderly man, then had participants rate the target on warmth and competence (Cuddy *et al.*, 2005). Strikingly, positive competence information did not affect competence ratings, although it did decrease the elderly target’s perceived warmth. Apparently, the negative aspect of the elderly stereotype (incompetence) resists change, whereas the positive aspect (warmth) is more malleable. Unfortunately, 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). This finding resembles the rewards accorded to women by sexism: when women behave incompetently, they are accorded paternalistic BS, being valued on warmth dimensions; but when they behave competently, they receive HS, being devalued on warmth dimensions (Glick and Fiske, 1996, 2001a; Glick *et al.*, 1997).

### 5.1.2. Traditional women

Like elderly people, some women (our second case study in this section), namely those who are assimilated into traditional gender stereotypes, are subjected to paternalism. Eagly and her colleagues (Eagly and Mladinic, 1994; Eagly *et al.*, 1994) established that, contrary to the assumption that subordinate groups receive negative stereotypes, women are stereotyped more positively than men. This has been termed the "women are wonderful" effect and occurs because women are seen as so communal and warm that these characteristics overcome the advantage men have on stereotypes of agency or competence (also positively valued traits). Thus, traditional images of women place them squarely into the paternalized, pitying category in the SCM's warmth  $\times$  competence space.

Ambivalent sexism theory (Glick and Fiske, 1996, 2001a) posits that women are paternalized because they traditionally have lower status and power, yet men are intimately interdependent on women (as mothers, wives, and romantic objects). In other words, women traditionally fit the SCM category of a lower status, but cooperative group, fostering paternalistic sexist attitudes. This subjectively positive aspect of ambivalence toward women, BS, is measured by such items as "Women should be cherished and protected by men" (Glick and Fiske, 1996). Consistent with its paternalistic flavor, BS is associated with subjectively positive stereotypes of women, a finding that holds true in samples from a variety of nations (Glick *et al.*, 2004).

At the same time, women are not a homogeneous group and some are viewed as competitors to men, particularly in light of social changes such as the feminist movement and women's influx into the paid work force. Thus, BS (or paternalism) toward traditional women is accompanied by HS toward nontraditional subgroups of women such as feminists and career women. Contemporary HS represents an envious prejudice toward women who are viewed as competitors with "unfair advantages" (e.g., one HS item complains, "When women lose to men in a fair competition, they typically complain about being discriminated against" and another that women unfairly seek "special favors, such as hiring policies that favor them over men, under the guise of asking for 'equality'").

Because HS and BS are directed toward different subgroups of women, these ideologies are psychologically compatible. That is, it is not psychologically inconsistent to have envious hostility toward feminists and career women, but paternalistic benevolence toward traditional types such as homemakers (Glick *et al.*, 1997; see also Haddock and Zanna, 1994; MacDonald and Zanna, 1998). Thus, different types of women inhabit different quadrants of the SCM space, with career women typically viewed as competent but not warm, whereas homemakers are usually characterized as warm but not competent (Fiske *et al.*, 2002b; though for an anomalous finding, see Cuddy *et al.*, 2007<sup>2</sup>). Consistent with Jackman's (1994) view of paternalism as a form of social control using an "iron hand in a velvet glove," BS provides incentives for women to remain in their cooperative, lower-status traditional roles, whereas HS deters them from becoming competitors seeking higher status roles.

Despite its positive tenor, the affection BS accords women is contingent on women remaining "in their place" and is itself a potent force for reinforcing gender inequality. Cross-cultural research using the ASI (Glick *et al.*, 2002, 2004) has shown that nations in which people more strongly endorse BS exhibit less structural gender equality, as assessed by national-level indicators such as the percentage of women in powerful positions in government (e.g., as representatives in parliaments) and business (e.g., as managers). Although this evidence is correlational, experimental studies show a specific way in which BS can act to reinforce gender inequality—by undermining women's resistance to it. Jost and Kay (2005) found that women who were merely exposed to items from the BS scale showed increased scores on a measure of system-justification. Compared to women in a control condition and those who were exposed only to HS items, women who saw BS items viewed society as fairer. Collective action to address inequality does not occur unless people feel they are being treated unfairly (e.g., Ellemers, 2001). Jost and Kay's findings dovetail with research showing that women's BS scores are especially strongly correlated (more so than men's BS scores) with endorsement of other traditional gender ideologies, a finding that appears consistently across cultures (Glick *et al.*, 2004). In other words, when women accept BS it is likely that they will also accept their traditional position in society. The soft bigotry of paternalism may be particularly effective because it offers women a subjectively positive (as opposed to hostile) attitude toward their group as a justification for gender inequality. BS also links to women's romantic fantasies, keeping their agentic ambitions in check (Rudman and Heppen, 2003).

<sup>2</sup> We continue to explore the anomaly whereby housewives are rated in the HC-HW cell in this sample, compared to all the others. The most obvious explanation (housewives rating themselves) is not supported. Our best guess is that the meaning of competence can sometimes shift with context.

Although we have noted that HS tends to be directed toward nontraditional and BS toward traditional types of women, the distinctions between these types of women often break down in contemporary society. In particular, many career women are also mothers. As a result, whether women elicit paternalistic or hostile treatment may depend on which subcategory is salient. It may seem on the surface that being paternalized is less damaging than being treated with hostility, but paternalistic discrimination creates important negative effects. For example, 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. But perhaps most importantly, and as might be expected in a work context, only perceived competence predicted positive behavioral intentions regarding hiring, promotion, and education. Consistent with the BIAS map, such discrimination reflects passive (though severely damaging) harm; the boost in working mothers' perceived warmth did not help them professionally, whereas their apparent loss in perceived competence hurt them. Like the elderly, women who are assimilated into traditional gender stereotypes are subjected to paternalism.

Other research demonstrates how women in work contexts receive both active facilitation, in the form of lavish praise for accomplishments, combined with passive harm, in the form of failure to assign important tasks or leadership roles (Vescio *et al.*, 2005). This paternalistic combination is particularly frustrating as the praise sets up expectations for tangible rewards that are not forthcoming. Of course, praise is cheap, but tangible rewards lead to higher status and power. Thus, although paternalistic treatment of women may come with a smile, it harms women professionally, illustrating an important domain in which paternalism continues to work against equality.

### 5.1.3. Summary

Paternalism's subjective positivity only masks and renders more effective the subtle ways by which it undermines equality. We have focused here on paternalistic treatment of the elderly and women, but other groups face paternalism as well. Most prominently in prior SCM work, the disabled also appear in the warm but not competent quadrant, a group that deserves further study. Further, Jackman (1994) argues that there are strong elements of paternalism in the treatment of African Americans and in prejudice toward people of low socioeconomic status. Paternalistic treatment's combination of active facilitation (e.g., being praised for accomplishing easy deeds) and passive harm (e.g., failure to give tangible rewards) is merely a recipe for placating subordinated groups while denying them any rise in status.



## 5.2. Envious prejudice: Competent but cold

The other ambivalent category addresses groups perceived to be competent but not warm, usually directed toward “model minorities” or powerful groups that are viewed as competitors. Here, we focus on envious prejudice toward Asian Americans and on Jews. We also consider how, in extreme cases, envious prejudices can motivate the most extreme forms of discrimination, ethnic cleansing and genocide.

### 5.2.1. Asians and Asian Americans

In the SCM surveys, Asians appear in the respected-but-disliked envious prejudice cluster, stereotyped as high competence but low warmth. Over time, Euro-Americans’ stereotypes have characterized Asians as intelligent but unsociable. In the classic Katz and Braly (1933) stereotyping study, Japanese were seen as intelligent, industrious, progressive, and shrewd (i.e., competent) but shy and quiet (unsociable); Chinese were sly (implying competence) but conservative, tradition-loving, superstitious, and loyal to family (implying deficient mainstream sociability). The combination of positive and negative stereotypes regarding competence and sociability was an early sign that the Asian outgroup can be perceived relatively favorably on, at most, only one dimension. Similar stereotyping trends held during following decades, with Chinese and Japanese Americans viewed as competent (intelligent, industrious) yet lacking in sociability toward the dominant group (quiet, shy; Gilbert, 1951; Karllins *et al.*, 1969; Maykovich, 1972). Most recently, in a replication of the Princeton Katz–Braly paradigm (Leslie *et al.*, 2007), both Chinese and Japanese were seen as especially intelligent, industrious, and scientifically minded (highly competent) but also loyal to family ties and reserved (still not sociable toward dominant group). Compared to Whites, Asians also have been categorized as more self-disciplined and traditional (again, relatively competent) but as less popular, sexually loose, and materialistic (again, relatively unsociable Jackson *et al.*, 1996). Thus, Asian American stereotypes over time demonstrate that the dominant group tends to characterize Asians along the lines of competence and unsociability.

The model minority stereotype is the most contemporary view of Asian Americans; it emphasizes their perceived competence by portraying them as diligent and successful in their economic and educational endeavors. In accord with the SCM, the popular stereotype, although seemingly positive, actually carries mixed feelings of simultaneous respect and resentment. Asians may be judged favorably on competence because the White ingroup praises and promotes competence. However, given the tendency for positive attributes to be appreciated as assets only when they reflect well on oneself and the ingroup (Hurh and Kim, 1989), the Asian outgroup’s presumed competence could instead engender group threat and competition

(see Insko and Schopler, 1998, for a review of assumed intergroup competition). Prejudiced Whites are most likely to interpret favorable competence characteristics as competitive with the ingroup and the mainstream and therefore subjectively unfavorable. Thus, we can expect racially biased perceivers to consider Asian Americans as excessively and unfairly high in competence. Mixed feelings about the perceived competence of Asian Americans emerges specifically within the context of positive attributes being regarded as negative when the outgroup is believed to possess them.

In a series of studies, Maddux *et al.* (2008) examined the role of realistic threat in explaining how it is that people who hold “positive” stereotypes (i.e., competence) about Asian Americans often harbor negative attitudes and emotions toward them. In the first study, in a realistic threat context, attitudes and emotions toward an anonymous group described by only positive, “model minority” attributes were significantly more negative than when the group was described using other positive attributes. A second study demonstrated that realistic threat significantly mediated the relationship between (a) the endorsement of both positive and negative stereotypes of Asian Americans, and (b) subsequent negative attitudes and emotions toward them. Two additional studies conceptually replicated this effect in experimental situations involving interactions with Asian Americans.

The representation of Asians as highly competent hard workers does not allow room for corresponding levels of sociability. Consequently, the model minority image reinforces stereotypes of Asian Americans lacking interpersonal skills and not often interacting with others. The low levels of sociability identified with Asians also supports tendencies toward outgroup derogation of Asians. That is, one function of viewing them as competent yet unsociable is to justify a system whereby competence is rewarded but some competent groups are rejected on other grounds, such as lacking sociability (Glick and Fiske, 2001b; Jost *et al.*, 2001).

Being stereotyped as competent yet unsociable makes Asians potential targets of a prejudice tinged with envy and discomfort. Anti-Asian American prejudice thus exemplifies envious prejudice, the type directed against outgroups viewed as competent but not warm, according to the SCM. We maintain that the possibility of competitive, threatening relationships between Whites and Asians underlies the tendency to disparage, fear, and discriminate against them.

On the basis of these theoretical assumptions, Lin *et al.* (2005) conducted six studies to demonstrate the viability of a mixed Asian stereotype in which low sociability justifies hostility toward high competence. Excessive competence and deficient sociability factors underlie the Scale of Anti-Asian American Stereotypes (SAAAS), designed to show this envious mixed prejudice. Study 1 began with 131 racial attitude items, using an exploratory factor analysis to examine the factor structure of the SAAAS items and

winnowed the SAAAS to 25 items for Studies 2 and 3, which tested 684 respondents on the focused version. Study 2 included a confirmatory factor analysis to confirm the factor structure of the SAAAS obtained in Study 1. Study 3 replicated the results from the Study 2 confirmatory factor analysis in another sample (cross-validation). Study 4 tested the scale's validity by examining whether extreme scores could predict everyday social behaviors toward Asian Americans. Study 5 replicated Study 4 at another campus, examining the whole spectrum of scores and separating the impact of each hypothesized subscale, sociability and competence. Altogether, Studies 4 and 5 tested the final 25-item SAAAS on 222 respondents at 3 campuses. Scores predicted outgroup friendships, cultural experiences, and (over)estimated campus presence. Study 6 explored whether perceived lack of sociability or perceived excessive competence underlies anti-Asian discrimination in an actual encounter. It showed that allegedly low sociability, rather than excessively high competence, drives rejection of Asian Americans, consistent with the functions of the SCM and with system justification theory (Jost and Banaji, 1994). Overall, the SAAAS demonstrates mixed, envious anti-Asian American prejudice, contrasting with more-often-studied contemptuous racial prejudices (i.e., against Blacks).

### 5.2.2. Jews

Anti-Semitism has taken the form of an envious prejudice for almost 2000 years. Early Christians needed to differentiate themselves from Judaism, which was the more established religion from which Christianity sprang, and needed to explain why more Jews did not accept Jesus as the messiah. In other words, Judaism initially had greater status and was an ideological competitor, creating the conditions that generate envious prejudice. This prejudice made its way into the New Testament, which includes accusations that Jews were ultimately responsible for killing Jesus, even though it was the Romans who were in charge, tried him, and administered a uniquely Roman form of execution, crucifixion (Sandmel, 1978). Anti-Semitism became deeply engrained in Christendom and beliefs that the Jews were in league with the devil attributed both evil intentions and supernatural powers (i.e., extraordinary competencies) to them. For instance, medieval Christians blamed Jews for engineering the Black Plague and forced them to wear special badges to identify themselves long before Nazis resurrected this idea (Rubenstein, 1966). The Christian prohibition against money lending, a role left to Jews, created fertile grounds for later secular anti-Semitism. "Middle-man" minorities are viewed as competent but cold competitors who profit off the misfortunes of others who need to use their services (Zenner, 1987). Medieval European pogroms and expulsions alternated with periods of tolerating the Jews as a kind of necessary evil given their middle-man role in the economy. This pattern fits the BIAS map's notion that envied groups elicit passive facilitation when

they are viewed as serving a function, but also active harm when a society is under stress and the envy has evolved into anger.

The Nazis defined the Jews as unalterable and implacable enemies of the German people, concocting biological rationalizations for anti-Semitism (i.e., that Jews had a different “racial essence”). Still, the envious nature of this prejudice remained intact. The Nazis believed that a powerful international Jewish conspiracy of industrialists and financiers (including German Jews) had caused Germany to lose World War I and brought about the collapse of its economy in order to profit from Germany’s misery. Their propaganda consistently exaggerated the power of Jews to shape world events and complained about the Jews’ over-representation in high-status professions in Germany, such as in the media, academia, medicine, and law, which would otherwise have been occupied by Aryans. According to archival analyses, the Fascists characterized the Jews in similar ways, also fitting the SCM’s competent but cold cluster (Volpato *et al.*, 2007). When an envied (i.e., competent but cold) group is viewed as an intractable enemy that is ruining society, active harm (e.g., violence) will likely result. This is particularly likely when envy turns into anger, and emotion that triggers offensive actions toward others (e.g., Mackie *et al.*, 2000), as discussed above (section 4.2.2.2.1).

In particular, Glick (2002, 2005) has suggested that when a society experiencing difficult life conditions (Staub, 1996), groups perceived as competent competitors (i.e., envied groups) are most likely to be scapegoated. This occurs because shared social miseries impel people to construct explanations for, as well as possible solutions to, these problems. At base, this is an adaptive tendency—successful societies must band together to diagnose and solve shared problems. However, widespread social problems usually have complex origins, so even experts cannot agree (e.g., not all economists are likely to agree on the causes of a collapsed economy). Blaming disliked human groups for social problems can be psychologically compelling because it locates the source of the problem and suggests a solution: elimination of the enemy group. Although this alone is not a new insight, classic theories of scapegoating (see Allport, 1954) failed to understand which groups are at greatest risk of being blamed and why.

An ideological model of scapegoating (Glick, 2002, 2005) posits that scapegoating is not a mere venting of frustration, but rather mediated by shared attributions that gain traction because they offer a culturally plausible explanation for societal problems. But not just any group is perceived as capable of causing such problems, which require not just bad intentions but competence and power. Thus, although the Nazis generally wanted to eliminate other “inferior races,” they were particularly obsessed with the Jews, whom they perceived as especially powerful both inside and outside Germany. The Nazi euthanasia program aimed at eliminating the physically and mentally ill sparked public outrage in Germany, causing the Nazis to halt it (Friedlander, 1995). Although the Nazis saw the ill as parasitical, the

general public could not stomach the idea of killing low-status innocents (i.e., people viewed as warm, though incompetent). By contrast, the idea that the Jews—a powerful minority that had, for centuries, been seen first as demonic and later as economically exploitative—were enemies of Germany who had to be eliminated was accepted by many and protested by few. Contrary to the older idea that any weak and vulnerable group is likely to be scapegoated, Glick's ideological theory proposes that relatively successful minorities, who have long been stereotyped as powerful, as well as ill-intentioned, are at the greatest risk for being blamed.

Other historical cases of genocidal attacks seem generally to fit this mold (Glick, 2002). In Turkey, the Armenians had a very similar profile to Jews in Germany in terms of the positions they occupied. During the collapse of the Ottoman Empire, they too were also characterized as a powerful enemy within the society and consequently slaughtered. In Cambodia, Pol Pot and his henchmen targeted intellectuals and professionals (i.e., people of high status) to be slain in the killing fields. In Rwanda in the 1990s, the Tutsi, also a high-status minority, were blamed for their nation's economic and social problems. Anti-Tutsi propaganda during this time bore a striking resemblance to "Jewish conspiracy" tracts, such as the Protocols of the Elders of Zion. Indeed, conspiracy theories about the outgroups' nefarious machinations against the ingroup may be the hallmark of envious prejudice. Such beliefs invariably ascribe heightened power and influence (i.e., competence) to the targeted outgroup.

In short, the BIAS map helps to explain why envied groups are often tolerated but later attacked, particularly under conditions that convert envy into anger. Because they are viewed as skilled, they are also seen as useful during more stable times, but they are extremely vulnerable to blame under social and economic instability. Thus, although pre-Nazi Germany was generally considered less anti-Semitic than many other European nations, the underlying stereotype of Jews as competent and conspiratorial competitors provided ripe conditions for later scapegoating. Ironically, the prior climate in Germany, in which Jews experienced relative success, may have provided greater perceived credibility among Germans for Nazis' claims that Jews were positioned to "stab Germany in the back." The dynamics of envious prejudice demand further study because this type of prejudice may help to understand the most extreme forms of intergroup hostility, genocidal attack.

### 5.2.3. Summary

Two envied outgroups present similar profiles: viewed as excessively competent, they allegedly control resources that the mainstream wants. Both Asian Americans and German Jews, as well as other high-status entrepreneurial outsiders, are viewed with a mixture of envy for their accomplishments and status, along with anger for their allegedly not sharing cooperatively with the ingroup and its reference groups. Such groups elicit

a “volatile ambivalence” (Harris *et al.*, in press) that obliges association and convenient cooperation when society is stable but sets the stage for attack and even mass killing under extreme social breakdown.

## 6. CURRENT AND FUTURE DIRECTIONS AND SUMMARY

This section reviews new directions for research suggested by the SCM and BIAS map, which would appear to have a variety of implications for both intergroup and interpersonal perception and interaction, that have yet to be plumbed, then provides a brief chapter summary.

### 6.1. Current and future directions

#### 6.1.1. Intergroup attributions

Earlier, we examined attributional *antecedents*, when we applied attributions about people’s responsibility for their social positions (e.g., whether their low status or stigma was “chosen”), to understanding the emotions and behaviors groups tend to elicit. In this section, we consider the attributional *consequences* of membership in groups that occupy different parts of the SCM space. How does the actor’s group membership affect the causal inferences perceivers make about the actor’s behavior? More specifically, when are perceivers likely to view a person’s actions as reflecting underlying dispositions versus excuse away their behavior as, for example, being due to the situation or luck? Prior work has generally assumed that attributions about behavior are less favorable toward outgroup members than ingroup members. For instance, women’s (but not men’s) successes are attributed to luck but their failures are attributed to dispositions (Swim and Sanna, 1996). Ethnic minorities’ (but not ingroups’) prosocial behavior is viewed as disingenuous but their antisocial behavior as dispositional (Hewstone and Ward, 1985). Pettigrew (1979) was confident enough about the generality of this pattern to refer to it as the “ultimate attribution error” (UAE). The UAE assumes a motivational bias, essentially an extension of the self-serving attribution bias (Arkin *et al.*, 1980) to intergroup attribution, such that positive behavior by or outcomes for “us” are viewed as reflecting dispositions and skills, whereas negative behaviors by or outcomes for “us” are excused away. Conversely, the UAE assumes a negative attributional pattern toward outgroups such that negative behavior by or outcomes for “them” are viewed as reflecting harmful dispositions or a persistent lack of skills, whereas positive behaviors by or outcomes for “them” are excused away.

On the basis of the SCM, Glick *et al.* (2007) have theorized that attributional biases toward members of different groups should not

uniformly follow the predictions of the UAE, but rather a more complex pattern governed by the match between the actor's behavior and stereotypes about that actor's group, labeled here as the Stereotype-Confirming Attribution Bias (SCAB). In other words, rather than a simple motivational bias (ingroup is wholly "good," and outgroup wholly "bad"), the specific content of group stereotypes is likely to create confirmatory cognitive biases that guide attributions about group members' behaviors. Glick *et al.* argue that, regardless of their valence (i.e., whether positive or negative), when behaviors or outcomes match stereotypical expectations, perceivers are likely to make dispositional attributions. By contrast, behaviors and outcomes that are stereotype-inconsistent should be excused away (e.g., as a fluke, situationally caused, etc.).

In some cases, the SCAB makes similar predictions to the UAE. For instance, a paternalized group member's success is likely to be attributed to luck or an envied group member's prosocial behavior to ulterior motives (not prosocial intentions). But consider what the UAE would predict for attributions about a paternalized group member's prosocial behavior or an envied group member's achievement behavior. If, for example, the elderly are an "outgroup," then the UAE would predict that *neither* an elderly person's prosocial actions (e.g., hugging someone) nor achievements (e.g., acing a difficult math test) would be seen as dispositional. The UAE would make the same exact predictions for other outgroups, such that members of envied groups (e.g., Asians and Jews) would elicit the same negative attributional pattern for those behaviors.

By contrast, the SCAB predicts that the elderly person's stereotypically consistent prosocial behavior would be seen as dispositional, but his or her stereotype inconsistent achievements would not be. In other words, an elderly person's hug would be credited to a warm disposition, but the same person's stellar test performance would be seen as a fluke (not a reflection of underlying competence). The SCAB predicts the opposite for envied groups—an Asian person's prosocial behavior might be viewed as situationally caused or as manipulative (rather than reflecting a warm disposition), but perceivers are likely to assume that an Asian who aced the math test did so because he or she is smart (i.e., dispositionally competent). In short, the SCAB suggests that the UAE's predictions will not hold for ambivalently stereotyped groups, but rather that a uniformly positive attribution pattern occurs only for groups that are positively stereotyped on both competence and warmth (admired groups, which are often ingroups) and that a uniformly negative attribution pattern holds only for groups subjected to contemptuous stereotypes that cast them as both incompetent and cold. The SCAB also points out the importance of distinguishing between behavioral domains related to each stereotype dimension. Warmth stereotypes should drive attributions about *social*

behavior, whereas competence stereotypes should drive attributions about *achievement* behaviors.

To test the SCAB's predictions, Glick *et al.* (in progress) have thus far conducted two experiments. In the first, participants viewed pretested SCM-space pictures of individuals that were each paired with a behavior the individual allegedly had performed (e.g., an elderly person who "ignored a friend who said hello"). For each person-behavior pair presented on the computer screen, participants indicated the degree to which they thought behavior reflected a "trait" (defined as "a stable and long-lasting personal characteristic").

The 64 pictures portrayed 8 individuals from each of 8 groups. The groups were selected based on prior research to represent the four SCM competence  $\times$  warmth quadrants, with two groups from each quadrant (Americans and students for competent and warm; rich and professionals for competent but cold; elderly and disabled for warm but incompetent; homeless and drug addicts for incompetent and cold). Because the participants were American college students, the admired groups were also ingroups. Sixty-four behaviors were randomly paired with each picture. The behaviors were either from the social or achievement domain and either positive (prosocial or a success) or negative (antisocial or a failure). Both the pictures and the behaviors were extensively pretested to ensure that they fit the intended categories.

The behaviors participants viewed as dispositional indeed depended on the actor's group membership. For univalent groups, where the UAE and SCAB make similar predictions, results supported both theories. The behaviors of admired group members (whether Americans or students) were seen as more dispositional if positive and less dispositional if negative, across both the social and achievement domains. Conversely, for groups subjected to contempt (whether homeless or drug addicts), behaviors were seen as more dispositional if negative and less dispositional if positive, across both the social and achievement domains.

However, for ambivalently stereotyped groups, those for which the theories make incompatible predictions, results supported the SCAB and revealed the shortcomings of the UAE. For envied group members (whether rich or professionals), achievement-related behaviors were viewed as more dispositional if successful (e.g., "solved an important puzzle") and less dispositional if unsuccessful (e.g., "did a poor job on a work project"). Indeed, this "positive" attributional pattern in the achievement domain was stronger for envied groups than for admired ingroups (Americans, students), a finding that directly contradicts the UAE. When it came to the social domain, however, envied groups were subjected to a negative attributional bias: relative to the admired groups, their prosocial behaviors were viewed as less dispositional, and their antisocial behaviors were viewed as more dispositional.



Also consistent with the SCAB, and problematic for the UAE, was a positive attributional bias toward paternalized groups (whether elderly or disabled) for social behaviors. Participants viewed paternalized group members' prosocial behaviors as more dispositional, and antisocial behaviors as less dispositional. Further, this bias was again stronger than the bias applied to the admired ingroup members. On the other hand, paternalized group members' successful achievements were dismissed as less dispositional and their failures as more dispositional, relative to the admired ingroups.

In sum, the first study supported the SCAB over the UAE. It also revealed evidence of compensatory stereotyping (Kay and Jost, 2003) of groups that receive ambivalent prejudices. The attributions implied that, relative to admired ingroups, perceivers view envied group members as hypercompetent (even if cold) and paternalized group members as especially warm (even if incompetent). Consistent with work by Harris and Fiske (2006), only groups in the contempt cell of the SCM were treated in a consistently and extremely negative way. These were the only groups that received an absolute negative attributional pattern, not only in the sense that attributional biases disfavored them on both social and achievement dimensions, but also in that negative behaviors by these groups were viewed as significantly more dispositional than positive behaviors. Even though envied and paternalized groups were each attributionally disfavored on one dimension *relative to admired ingroups*, in neither case was the bias so stark that negative behaviors by these groups were viewed as more dispositional than positive behaviors.

A second study used a different method that corrected for potential weaknesses in the first study's use of pictures of group members. Because it is difficult to find smiling pictures of homeless people and drug addicts, and effects in the first study might have been influenced by facial expressions or other confounds in the pictures. In the second study, participants read a set of four behaviors said to have been performed by an individual. Each set included two social and two achievement behaviors. Within each domain, valence of the behaviors was the same. Between trials, however, all combinations of positive and negative behaviors in the two domains were represented. The behaviors were those used in the prior study. Following each set of four behaviors participants rated "How likely is it that these behaviors were done by . . ." with the remainder of the sentence filled in randomly with the name of one of the groups used in the first study (e.g., ". . . a homeless person"). This method therefore used group labels, not pictures.

Again, except for the cases where predictions were similar, results supported the SCAB and not the UAE. Participants viewed the behavioral set that paired positive achievement with positive social behaviors as most likely performed by admired ingroup members while they viewed the combination of negative achievement and negative social behaviors

as least likely performed by members of admired groups. The opposite was true for groups subject to contempt. Again, it is for ambivalently stereotyped groups that predictions differ for the UAE and SCAB. Consistent with the SCAB, participants rated the set of acts combining positive achievement with negative social behaviors as most likely done by envied groups, and the set combining negative achievement with positive social behaviors as least likely done by envied groups. The opposite happened for paternalized groups, for whom the set combining negative achievement with positive social behaviors was viewed as most likely and the set combining positive achievement with negative social behaviors was rated least likely.

In sum, past intergroup attribution research has been blinded by the assumption of straightforward antipathy toward outgroups. The SCM suggests a new way of thinking about how stereotype-behavior consistency (versus inconsistency) drives attributions about individual group members' behaviors. The SCAB also suggests the need to distinguish between social and achievement behaviors (corresponding, respectively, to warmth and competence stereotypes) to understand the complexities of intergroup biases in attributions. These ideas actually hark back to the earliest days of attribution theory with Heider's (1958) notions that perceivers seek to discern an actor's intentions and abilities to determine whether to make dispositional attributions. A Heiderian analysis dovetails nicely with the SCM's contention that warmth and competence are fundamental dimensions precisely because they address others' perceived intentions (Heider's "try") and capabilities (Heider's "can").

Of course, behaviors can combine both social and achievement elements, such as organizing a complex charity drive (on the positive side), or pulling off a complex fraud to steal others' money (on the negative side). In these cases, perceived warmth and competence should interact to affect attributions. Heider (1958) also anticipated such situations when he noted how "task difficulty" affects attributions. A behavior that has social implications (i.e., helps or harms others) but is difficult to pull off (i.e., can also be seen as involving achievement) should be viewed as beyond the capabilities of incompetent groups, even if they might have the intention to accomplish it.

Continuing this line of research, we plan to explore how these biases affect group-level attributions or what Tajfel (1981) called "social attribution." This refers to attributions about actions of the group as a whole, not just how group categories affect how individual members are perceived. The difference can be illustrated by contrasting such inferences as "Of course she won the case, she's a smart Jew" (individual) versus "Of course they caused the economic downturn, that's what Jews are capable of and interested in doing" (social). The latter type of attribution is central to Glick's (2002, 2005) ideological model of scapegoating (discussed earlier).

Only envied groups should be viewed as likely to have the desire and ability to cause large-scale events that harm others (while putatively enriching themselves).

### 6.1.2. Neural signatures for SCM space?

Another future direction also operates at the individual level, but emphasizes even more internal processes within the perceiver. Because we argue that the SCM represents fundamental dimensions of social perception—namely, the other's intent and capacity to enact it—the social brain should be implicated in these canonical forms of perception. As noted earlier, people judge warmth and trustworthiness in a fraction of a second (Hack *et al.*, 2007; Willis and Todorov, 2006; Ybarra *et al.*, 2001). The amygdala, a brain region implicated in vigilance, correlates with judged trustworthiness in face perception (Todorov *et al.*, 2007). People with damaged amygdala cannot reliably judge trustworthiness (Adolphs *et al.*, 1998). Vigilance puts the perceiver on alert, guarding against interpersonal threat.

People also judge the competence of faces fairly quickly (with measurable consequences, e.g. for voting, Todorov *et al.*, 2005). Because of the strong link between perceived status and competence, one would predict that high-status, high-competence untrustworthy competitors (i.e., envied groups) would also activate the amygdala's vigilance system, and they do (Harris *et al.*, in press).

Such findings related to two underlying dimensions of the SCM suggest some potential neural signatures for distinct quadrants. So far, Harris, Fiske, and colleagues have studied two quadrants, the envied high-competence/low-warmth outgroups, and the disgusting, low-low outgroups. In a typical neuroimaging test of the SCM, 60 pretested photographs from each quadrant of the space appear on a screen in the scanner; participants view the photos and either report which SCM emotion they elicit, or merely passively view the photos (it makes no difference to the results).

The study of envied outgroups (pictured as rich people and professionals) compared them to groups in the other three quadrants (elderly or disabled, homeless or drug addicts, Americans or students). Envied groups especially activated the amygdala, as noted, suggesting special vigilance. In addition, they activated the mPFC, a brain area reliably associated with dispositional inferences and thinking about other people's minds ("mentalizing"). This fits the idea that people watch high-status, high-power others because they control resources, and that people make dispositional inferences about them, in an effort to predict their behavior (Fiske, 1993).

The mPFC has a crucial role in social cognition (Amodio and Frith, 2006; Mitchell *et al.*, 2005). For example, it activates uniquely to the exact pattern of consensus, consistency, and distinctiveness information about behavior that elicits a dispositional inference (Harris *et al.*, 2005). Objects

viewed behaving according to the same patterns do not activate the mPFC (Harris and Fiske, in press). The idea that the brain has a special sensitivity to social information should gladden the hearts of social psychologists. But the news is not all good.

The low-low outgroups, the most negative on the SCM and alone among all the other quadrants, fail to activate the mPFC significantly above baseline (Harris and Fiske, 2006). Instead, homeless people and drug addicts activate the insula, an area implicated in disgust and arousal. These neural patterns fit the dehumanization of extreme outgroups in the SCM space. Indeed, in the SCM surveys, homeless people were rated so negatively on both warmth and competence that often they are three standard deviations out from the mean of the rest of the groups and had to be removed from the cluster analysis so that they did not distort it. This extreme form of prejudice is perhaps reflected in neuroimaging data. Of course, representation in the brain does not mean such prejudice is hard-wired and inevitable; social context affects neural responses, naturally. When perceivers imagine what to feed the homeless and drug-addicted, the mPFC comes back on line (Harris and Fiske, 2007).

Ongoing research elaborates on responses to envied groups and examines reactions to pitied groups, to understand the ambivalent mixtures entailed. Although these neuroimaging results do not by themselves establish unique emotional reactions to distinct clusters of outgroups, they do, along with the survey and experimental results already reported, provide a form of converging evidence less open to social desirability biases.

### 6.1.3. Warmth and competence in self-perception

If dimensions of warmth and competence are fundamental in judging other people and other groups, perhaps they are fundamental to judging even oneself. According to Abele and Wojciszke (2007), the main distinction between these dimensions concerns profitability for self (agency) or for others (communion). By this logic, agency is more desirable for self, and communion is more desirable for others. Their research supports this and further that outcome dependency increases importance of another person's agency.

Moreover, people can be differentiated according the degree to which their sense of self-worth (i.e., global self-esteem) derives from appraisals of the self as competent or as warm (Mandisodza *et al.*, 2005). Self-esteem for some individuals is more highly related to appraisals of competence, whereas for others it is more highly related to appraisals of warmth. Given this, Mandisodza *et al.* suggested that some generality should exist between self-appraisals and appraisals of other individuals and groups. For instance the more important competence differences are in the appraisal of self, the more important they should be in appraisals of other targets, be they groups or individuals. And

reciprocally, the more important warmth is in the appraisal of self, the more important it should be in appraisals of other targets.

To explore this hypothesis, they asked subjects to complete a self-esteem scale, which yielded the two dimensions of self-evaluation: competence appraisals and warmth appraisals (Tafarodi and Ho, 2006). From this, they computed a difference for each participant (competence self-evaluation minus warmth self-evaluation). Additionally, they asked participants to judge eight target groups and four target individuals on dimensions of competence, warmth, and overall evaluation. They then collapsed across the targets and showed that global evaluations of targets are more highly related to appraisals of their competence for people with higher self-appraisals on competence than on warmth, whereas for those whose self-appraisal is higher on warmth than competence, warmth judgments of targets are more highly related to overall evaluations of those targets than are competence judgments. This research continues.

## 6.2. Summary

Synthesizing two models of intergroup bias, SCM and BIAS map, with research in interpersonal perception, we have argued that considerable empirical evidence identifies warmth and competence as universal dimensions of social judgment, across stimuli, cultures, and time. Evaluations of both individuals and groups on these dimensions follow from social structural relationships. Interdependence predicts perceived warmth, and status predicts perceived competence. Each combination of high and low evaluations on these dimensions has distinct emotional and behavioral consequences. This fact especially matters to group-based prejudices. Group stereotypes most often appear high on one dimension and low on the other; the ensuing ambivalent affect and volatile behavior endanger constructive intergroup relations. Targets perceived as warm and competent elicit uniformly positive emotions (admiration) and behavior (help, association). Those lacking both warmth and competence elicit uniform negativity: disgust, neglect, and attack. But targets classified as high on one dimension and low on the other elicit volatile, ambivalent reactions. High warmth with low competence yields pity and patronizing help or neglect. Low warmth with high competence evokes envy and strategic association or, under threat, attack. Future work focuses on attribution, neuroscience, and self-perception.

## ACKNOWLEDGMENTS

Preparation of this chapter was facilitated by research funds from the Kellogg School of Management at Northwestern University and from Princeton University. The authors wish to thank their joint and respective research collaborators for stimulating intellectual support.

## REFERENCES

- Abele, A. E. (2003). The dynamics of masculine-agentic and feminine-communal traits: Findings from a prospective study. *J. Pers. Soc. Psychol.* **85**, 768–776.
- Abele, A. E., and Wojciszke, B. (2007). The effect of success and failure experiences on agency. *Eur. J. Soc. Psychol.* **37**, 1–13.
- Abele, A. E., Cuddy, A. J. C., Yzerbyt, V. Y., and Judd, C. M. (eds.) (in press). Universal dimensions of social perception: Communion and agency. Special issue of European Journal of Social Psychology.
- Abelson, R. P., Kinder, D. R., Peters, M. D., and Fiske, S. T. (1982). Affective and semantic components in political person perception. *J. Pers. Soc. Psychol.* **42**, 619–630.
- Adolphs, R., Tranel, D., and Damasio, A. R. (1998). The human amygdala in social judgment. *Nature* **393**, 470–474.
- Ajzen, I. (2001). Nature and operation of attitudes. *Annu. Rev. Psychol.* **52**, 27–58.
- Alexander, M. G., Brewer, M. B., and Hermann, R. K. (1999). Images and affect: A functional analysis of outgroup stereotypes. *J. Pers. Soc. Psychol.* **77**, 78–93.
- Alexander, M. G., Brewer, M. B., and Livingston, R. W. (2005). Putting stereotype content in context: Image theory and interethnic stereotypes. *Pers. Soc. Psychol. Bull.* **31**, 781–794.
- Allport, G. W. (1954). "The Nature of Prejudice". Addison-Wesley, Reading, MA.
- Altermatt, T. W., DeWall, C. N., and Leskinen, E. (2003). Agency and virtue: Dimensions of female stereotypes. *Sex Roles* **49**, 631–641.
- Amodio, D. M., and Frith, C. D. (2006). Meeting of minds: The medial frontal cortex and social cognition. *Nat. Rev. Neurosci.* **7**, 268–277.
- Andreoletti, C., Maurice, J. K., and 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, February, 2001, San Antonio, TX.
- Arkin, R. M., Cooper, H. M., and Kolditz, T. A. (1980). A statistical review of the literature concerning the self-serving attribution bias in interpersonal influence situations. *J. Pers.* **48**, 435–448.
- Asbrock, F., and Cuddy, A. J. C. (2008). Interpersonal behavioral outcomes of warmth and competence judgements. Manuscript under review.
- Asch, S. E. (1946). Forming impressions of personality. *J. Abnorm. Soc. Psychol.* **41**, 258–290.
- Avolio, B. J., and Barrett, G. J. (1987). Effects of age stereotyping in a simulated interview. *Psychol. Aging* **2**, 56–63.
- Ayduk, O., May, D., Downey, G., and Higgins, E. T. (2003). Tactical differences in coping with rejection sensitivity: The role of prevention pride. *Pers. Soc. Psychol. Bull.* **29**, 435–448.
- Bakan, D. (1956). "The Duality of Human Existence: An Essay on Psychology and Religion." Rand McNally, Oxford, England.
- Bales, R. F. (1950). A set of categories for the analysis of small group interaction. *Am. Sociol. Rev.* **15**, 257–263.
- Bales, R. F. ed. (1999). "Social Interaction Systems: Theory and Measurement." Transaction Press, New Brunswick, NJ.
- Barnett, M. A., Quackenbush, S. W., and 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. *J. Soc. Distress Homel.* **6**, 238–302.
- Batson, C. D. (1998). Altruism and prosocial behavior. In "Handbook of Social Psychology" (D. T. Gilbert, S. T. Fiske, and G. Lindzey, eds.) 4th ed., Vol. 2, pp. 282–316. McGraw-Hill, Boston.
- Bond, M. H. (1994). Trait theory and cross cultural studies of person perception. *Psychol. Inq.* **2**, 114–168.

- Bradac, J. J. (1990). Language attitudes and impression formation. In "Handbook of Language and Social Psychology" (H. Giles and W. P. Robinson, eds.), pp. 387–412. Wiley, New York.
- Brewer, M. B., and Alexander, M. G. (2002). Intergroup emotions and images. In "From Prejudice to Intergroup Emotions: Differentiated Reactions to Social Groups" (D. M. Mackie and E. R. Smith, eds.), pp. 209–225. Psychology Press, New York.
- Buss, A. H. (1961). "The Psychology of Aggression." Wiley, New York.
- Buss, D. M. (1981). Sex differences in the evaluation and performance of dominant acts. *J. Pers. Soc. Psychol.* **40**, 147–154.
- Cacioppo, J. T., Gardner, W. L., and Berntson, G. G. (1997). Beyond bipolar conceptualizations and measures: The case of attitudes and evaluative space. *Pers. Soc. Psychol. Rev.* **1**, 3–25.
- Cadinu, M. R., and Cerchioni, M. (2001). Compensatory biases after intergroup threat: 'Yeah, but we have a good personality.' *Eur. J. Soc. Psychol.* **31**, 353–367.
- Capozza, D., Trifiletti, E., Pasin, A., and Durante, F. (2007). EPA and warmth-competence dimensions: Are the two universals redundant? Unpublished manuscript. Universita di Padova.
- Capriello, P., Cuddy, A. J. C., and Fiske, S. T. (2007). Social structure shapes cultural stereotypes and emotions: A causal test of the stereotype content model. Manuscript submitted for publication.
- Carlson, R. (1971). Sex differences in ego functioning: Exploratory studies of agency and communion. *J. Consult. Clin. Psychol.* **37**, 267–277.
- Casciaro, T., and Sousa-Lobo, M. (2005). Competent jerks, lovable fools, and the formation of social networks. *Harv. Bus. Rev.* **83**(6), 92–99.
- Chemers, M. M. (1997). "An Integrative Theory of Leadership." Lawrence Erlbaum Associates, Mahwah, NJ.
- Chemers, M. M. (2001). Leadership effectiveness: An integrative review. In "Blackwell Handbook of Social Psychology: Group Processes" (M. A. Hogg and R. S. Tindale, eds.), pp. 376–399. Blackwell, Oxford.
- Cialdini, R. B., Borden, R. J., Thorne, R. J., Walker, M. R., Freeman, S., and Sloan, L. R. (1976). Basking in reflected glory: Three (football) field studies. *J. Pers. Soc. Psychol.* **34**, 366–375.
- Clausell, E., and Fiske, S. T. (2005). When do the parts add up to the whole? Ambivalent stereotype content for gay male subgroups. *Soc. Cogn.* **23**, 157–176.
- Cottrell, C. A., and Neuberg, S. L. (2005). Different emotional reactions to different groups: A sociofunctional threat-based approach to "prejudice." *J. Pers. Soc. Psychol.* **88**, 770–789.
- Crick, N. R., and Grotpeter, J. K. (1995). Relational aggression, gender, and social-psychological adjustment. *Child Dev.* **66**, 710–722.
- Cuddy, A. J. C., and Fiske, S. T. (2002). Doddering, but dear: Process, content, and function in stereotyping of older persons. In "Ageism" (T. D. Nelson, ed.), pp. 3–26. MIT Press, Cambridge, MA.
- Cuddy, A. J. C., and Frantz, C. M. (2007). Legitimizing status inequalities: The effect of race on motherhood discrimination. Manuscript submitted for publication.
- Cuddy, A. J. C., Fiske, S. T., and Glick, P. (2004). When professionals become mothers, warmth doesn't cut the ice. *J. Soc. Issues* **60**, 701–718.
- Cuddy, A. J. C., Norton, M. I., and Fiske, S. T. (2005). This old stereotype: The pervasiveness and persistence of the elderly stereotype. *J. Soc. Issues* **61**, 265–283.
- Cuddy, A. J. C., Fiske, S. T., and Glick, P. (2007). The BIAS Map: Behaviors from intergroup affect and stereotypes. *J. Pers. Soc. Psychol.* **92**, 631–648.

- Cuddy, A. J. C., Fiske, S. T., Kwan, V. S. Y., Glick, P., Demoulin, S., Leyens, J.-Ph., Bond, M. H., Croizet, J.-C., Ellemers, N., Sleebos, E., Htun, T. T., Yamamoto, M., et al. (in press). Is the stereotype content model culture-bound? A cross-cultural comparison reveals systematic similarities and differences. *Br. J. Soc. Psychol.*
- Devos, T., Silver, L. A., Mackie, D. M., and Smith, E. R. (2002). Experiencing intergroup emotions. In "From Prejudice to Intergroup Emotions: Differentiated Reactions to Social Groups" (D. M. Mackie and E. R. Smith, eds.), pp. 111–134. Psychology Press, New York.
- Diekmann, A. B., and Eagly, A. H. (2000). Stereotypes as dynamic constructs: Women and men of the past, present, and future. *Pers. Soc. Psychol. Bull.* **26**, 1171–1188.
- Dijker, A. J. (1987). Emotional reactions to ethnic minorities. *Eur. J. Soc. Psychol.* **17**, 305–325.
- Dijker, A. J., Kok, G., and Koomen, W. (1996a). Emotional Reactions to People with AIDS. *J. Appl. Soc. Psychol.* **26**, 731–738.
- Dijker, A. J., Koomen, W., van den Heuvel, H., and Frijda, N. H. (1996b). Perceived antecedents of emotional reactions in inter-ethnic relations. *Br. J. Soc. Psychol.* **35**, 313–329.
- Dovidio, J. F., Brigham, J. C., Johnson, B. T., and Gaertner, S. L. (1996). Stereotyping, prejudice, and discrimination: Another look. In "Stereotypes and Stereotyping" (C. N. Macrae, C. Stangor, and M. Hewstone, eds.) pp. 276–319. Guilford, New York.
- Dovidio, J. F., Esses, V. M., Beach, K. R., and Gaertner, S. L. (2002). The role of affect in determining intergroup behavior: The case of willingness to engage in intergroup contact. In "From Prejudice to Intergroup Emotions: Differentiated Reactions to Social Groups" (D. M. Mackie and E. R. Smith, eds.), pp. 153–171. Psychology Press, New York.
- Eagly, A. H. (1987). "Sex Differences in Social Behavior: A Social-Role Interpretation." Erlbaum, Hillsdale, NJ.
- Eagly, A. H., and Mladinic, A. (1989). Gender stereotypes and attitudes toward women and men. *Pers. Soc. Psychol. Bull.* **15**, 543–558.
- Eagly, A. H., and Mladinic, A. (1994). Are people prejudiced against women? Some answers from research on attitudes, gender stereotypes, and judgments of competence. In "European Review of Social Psychology" (W. Stroebe and M. Hewstone, eds.), Vol. 5, pp. 1–35. Wiley, New York.
- Eagly, A. H., and Steffen, V. J. (1984). Gender stereotypes stem from the distribution of women and men into social roles. *J. Pers. Soc. Psychol.* **46**, 735–754.
- Eagly, A. H., Mladinic, A., and Otto, S. (1994). Cognitive and affective bases of attitudes toward social groups and social policies. *J. Exp. Soc. Psychol.* **30**, 113–137.
- Eagly, A. H., Wood, W., and Diekmann, A. H. (2000). Social role theory of sex differences and similarities: A current appraisal. In "The Developmental Social Psychology of Gender" (T. Eckes and H. M. Trautner, eds.), pp. 123–174. Erlbaum, Mahwah, NJ.
- Eagly, A. H., Johannesen-Schmidt, M. C., and van Engen, M. L. (2003). Transformational, transactional, and laissez-faire leadership styles: A meta-analysis comparing women and men. *Psychol. Bull.* **129**, 569–591.
- Eckes, T. (2002). Paternalistic and envious gender stereotypes: Testing predictions from the stereotype content model. *Sex Roles* **47**, 99–114.
- Ellemers, N. (2001). Social identity, commitment and work behavior. In "Social Identity Processes in Organizational Contexts" (M. A. Hogg and D. J. Terry, eds.). Psychology Press, Hove, Sussex.
- Ellemers, N., Van Rijswijk, W., Roefs, M., and Simons, C. (1997). Bias in intergroup perceptions: Balancing group identity with social reality. *Pers. Soc. Psychol. Bull.* **23**, 186–198.



- Erber, J. T., and Prager, I. C. (1999). Age and memory: Perceptions of forgetful young and older adults. In "Social Cognition and Aging" (T. M. Hess and F. Blanchard-Fields, eds.), pp. 198–221. Academic Press, San Diego, CA.
- Erber, J. T., Etheart, M. E., and Szuchman, L. T. (1992). Age and forgetfulness: Perceivers' impressions of targets' capability. *Psychol. Aging* **7**, 479–483.
- Erber, J. T., Rothberg, S. T., Szuchman, L. T., and Etheart, M. E. (1993). How physicians appraise everyday memory failures of patients across the adult life span. *Exp. Aging Res.* **19**, 195–207.
- Erber, J. T., Prager, I. G., Williams, M., and Caiola, M. A. (1996). Age and forgetfulness: Confidence in ability and attribution for memory failures. *Psychol. Aging* **11**, 310–315.
- Esses, V. M., and Dovidio, J. F. (2002). The role of emotions in determining willingness to engage in intergroup contact. *Pers. Soc. Psychol. Bull.* **28**, 1202–1214.
- Esses, V. M., Haddock, G., and Zanna, M. P. (1993). Values, stereotypes, and emotions as determinants of intergroup attitudes. In "Affect, Cognition, and Stereotyping: Interactive Processes in Group Perception" (D. M. Mackie and D. L. Hamilton, eds.), pp. 137–166. Academic Press, San Diego, CA.
- Esses, V. M., Dovidio, J. F., Jackson, L. M., and Armstrong, T. L. (2001). The immigration dilemma: The role of perceived group competition, ethnic prejudice, and national identity. *J. Soc. Issues* **57**, 389–412.
- Fiske, S. T. (1980). Attention and weight in person perception: The impact of negative and extreme behavior. *J. Pers. Soc. Psychol.* **38**, 889–906.
- Fiske, S. T. (1992). Thinking is for doing: Portraits of social cognition from Daguerreotype to laserphoto. *J. Pers. Soc. Psychol.* **63**, 877–889.
- Fiske, S. T. (1993). Controlling other people: The impact of power on stereotyping. *Am. Psychol.* **48**, 621–628.
- Fiske, S. T., and Cuddy, A. J. C. (2006). Stereotype content across cultures as a function of group status. In "Social Comparison Processes and Levels of Analysis" (S. Guimond, ed.), Cambridge University Press, New York.
- Fiske, S. T., and Ruscher, J. B. (1993). Negative interdependence and prejudice: Whence the affect?. In "Affect, Cognition, and Stereotyping: Interactive Processes in Group Perception" (D. M. Mackie and D. L. Hamilton, eds.), pp. 239–268. Academic Press, London.
- Fiske, S. T., Xu, J., Cuddy, A. C., and Glick, P. (1999). (Dis)respecting versus (dis)liking: Status and interdependence predict ambivalent stereotypes of competence and warmth. *J. Soc. Issues* **55**, 473–491.
- Fiske, S. T., Cuddy, A. J., and Glick, P. (2002a). Emotions up and down: Intergroup emotions result from perceived status and competition. In "From Prejudice to Intergroup Emotions: Differentiated Reactions to Social Groups" (D. M. Mackie and E. R. Smith, eds.), pp. 247–264. Psychology Press, Philadelphia, PA.
- Fiske, S. T., Cuddy, A. J. C., Glick, P., and Xu, J. (2002b). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *J. Pers. Soc. Psychol.* **82**, 878–902.
- Fiske, S. T., Cuddy, A. J. C., and Glick, P. (2007). Universal dimensions of social cognition: warmth and competence. *Trends Cogn. Sci.* **11**, 77–83.
- Friedlander, H. (1995). "The Origins of Nazi Genocide: From Euthanasia to the Final Solution." University of North Carolina Press, Chapel Hill, NC.
- Frijda, N. H. (1986). "The Emotions." Cambridge University Press, New York.
- Frijda, N. H., Kuipers, P., and ter Schure, E. (1989). Relations among emotion, appraisal, and emotional action readiness. *J. Pers. Soc. Psychol.* **57**, 212–228.
- Geen, R. (1998). Aggression and antisocial behavior. In "Handbook of Social Psychology" (D. Gilbert, S. Fiske, and G. Lindzey, eds.) 4th ed., Vol. 2, pp. 317–356. McGraw-Hill, Boston.

- Gilbert, G. M. (1951). Stereotype persistence and change among college students. *J. Abnorm. Soc. Psychol.* **46**, 245–254.
- Gilbert, D. T., and Malone, P. S. (1995). The correspondence bias. *Psychol. Bull.* **117**, 21–38.
- Glick, P. (2002). Sacrificial lambs dressed in wolves' clothing: Envious prejudice, ideology, and the scapegoating of Jews. In "Understanding Genocide: The Social Psychology of the Holocaust" (L. S. Newman and R. Erber, eds.), pp. 113–142. Oxford University Press, London.
- Glick, P. (2005). Choice of scapegoats. In "Reflecting on the Nature of Prejudice" (J. F. Dovidio, P. Glick, and L. Rudman, eds.) pp. 244–261. Blackwell Press, Malden, MA.
- Glick, P., and Fiske, S. T. (1996). The ambivalent sexism inventory: Differentiating hostile and benevolent sexism. *J. Pers. Soc. Psychol.* **70**, 491–512.
- Glick, P., and Fiske, S. T. (1999). Sexism and other "isms": Interdependence, status, and the ambivalent content of stereotypes. In "Sexism and Stereotypes in Modern Society: The Gender Science of Janet Taylor Spence" (W. B. Swann, Jr., L. A. Gilbert, and J. Langlois, eds.), pp. 193–221. American Psychological Association, Washington, DC.
- Glick, P., and Fiske, S. T. (2001a). Ambivalent sexism. In "Advances in Experimental Social Psychology" (M. P. Zanna, ed.), Vol. 33, pp. 115–188. Academic Press, Thousand Oaks, CA.
- Glick, P., and Fiske, S. T. (2001b). Ambivalent stereotypes as legitimizing ideologies: Differentiating paternalistic and envious prejudice. In "The Psychology of Legitimacy: Ideology, Justice, and Intergroup Relations" (J. T. Jost and B. Major, eds.), pp. 278–306. Cambridge University Press, New York.
- Glick, P., Diebold, J., Bailey-Werner, B., and Zhu, L. (1997). The two faces of Adam: Ambivalent sexism and polarized attitudes towards women. *Pers. Soc. Psychol. Bull.* **23**, 1323–1334.
- Glick, P., Lameiras, M., Fiske, S. T., Eckes, T., Masser, B., Volpato, C., Manganelli, A. M., Pek, J., Huang, L.-I., Sakalli-Ugurlu, N., Rodriguez Castro, Y. R., D'Avila Pereira, M. L., et al. (2004). Men are bad but bold (and women are wonderful but weak): Hostile as well as benevolent attitudes toward men predict gender inequality in 16 nations. *J. Pers. Soc. Psychol.* **86**, 713–728.
- Glick, P., Cuddy, A. J. C., and Fiske, S. T. (2007). The stereotype confirming attribution bias. Unpublished data.
- Green, J. D., and Sedikides, C. (1999). Affect and self-focused attention revisited: The role of affect orientation. *Pers. Soc. Psychol. Bull.* **25**, 104–119.
- Hack, T. E., Goodwin, S. A., and Fiske, S. T. (2007). The primacy of warmth in social evaluations. Unpublished manuscript, Purdue University.
- Haddock, G., and Zanna, M. P. (1994). Preferring "housewives" to "feminists": Categorization and the favorability of attitudes toward women. *Psychol. Women Q.* **18**, 25–52.
- Hamilton, D. L., and Sherman, S. J. (1996). Perceiving persons and groups. *Psychol. Rev.* **103**, 336–355.
- Hamilton, D. L., and Zanna, M. P. (1974). Context effects in impression formation: Changes in connotative meaning. *J. Pers. Soc. Psychol.* **29**, 649–654.
- Harris, L. T., and Fiske, S. T. (2006). Dehumanizing the lowest of the low: Neuro-imaging responses to extreme outgroups. *Psychol. Sci.* **17**, 847–853.
- Harris, L. T., and Fiske, S. T. (2007). Social groups that elicit disgust are differentially processed in mPFC. *Soc. Cogn. Affect. Neurosci.* **2**, 45–51.
- Harris, L. T., Todorov, A., and Fiske, S. T. (2005). Attributions on the brain: Neuro-imaging dispositional inferences, beyond theory of mind. *NeuroImage* **28**, 763–769.

- Harris, L. T., Fiske, S. T., and Cikara, M. (in press). Envy, as predicted by the stereotype content model: A volatile ambivalence. In "Envy: Theory and Research" (R. Smith, ed.), Oxford, New York.
- Harwood, J., Giles, H., Ota, H., Pierson, H. D., Gallois, C., Ng, S. H., Lim, T. S., and Somera, L. (1996). College students' trait ratings of three age groups around the Pacific Rim. *J. Cross Cult. Gerontol.* **11**, 307–317.
- Heckhausen, J., Dixon, R. A., and Baltes, P. B. (1989). Gains and losses in development throughout adulthood as perceived by different adult age groups. *Dev. Psychol.* **25**, 109–121.
- Heider, F. (1958). "The Psychology of Interpersonal Relations." Wiley, Oxford, England.
- Heine, S. J., Lehman, D. R., Markus, H. R., and Kitayama, S. (1999). Is there a universal need for positive self-regard? *Psychol. Rev.* **106**, 766–794.
- Hewstone, M., and Ward, C. (1985). Ethnocentrism and causal attribution in Southeast Asia. *Pers. Soc. Psychol. Bull.* **48**, 614–623.
- Hoffman, C., and Hurst, N. (1990). Gender stereotypes: Perception or rationalization? *J. Pers. Soc. Psychol.* **58**, 197–208.
- Hofstede, G. (1980). "Culture's Consequences: International Differences in Work-Related Values." Sage, Beverly Hills, CA.
- Hui, C. H., and Triandis, H. C. (1985). Measurement in cross-cultural psychology: A review and comparison of strategies. *J. Cross Cult. Psychol.* **16**, 131–152.
- Hummert, M. L., Garstka, T. A., O'Brien, L. T., Greenwald, A. G., and Mellott, D. S. (2002). Using the implicit association test to measure age differences in implicit social cognitions. *Psychol. Aging* **17**, 482–495.
- Hurh, W. M., and Kim, K. C. (1989). The "success" image of Asian Americans: Its validity, and its practical and theoretical implications. *Ethnic Racial Studies* **12**, 512–538.
- Insko, C. A., and Schopler, J. (1998). Differential distrust of groups and individuals. In "Intergroup Cognition and Intergroup Behavior" (C. Sedikides, J. Schopler, and C. A. Insko, eds.) pp. 75–107. Lawrence Erlbaum, Mahwah, NJ.
- Izard, C. E. (1991). "The Psychology of Emotions." Plenum, New York.
- Izard, C. E., Libero, D. Z., Putnam, P., and Haynes, O. M. (1993). Stability of emotion experiences and their relations to traits of personality. *J. Pers. Soc. Psychol.* **64**, 847–860.
- Jackman, M. R. (1994). "The Velvet Glove: Paternalism and Conflict in Gender, Class, and Race Relations." University of California Press, Berkeley.
- Jackson, L. A., Hodge, C. N., Gerard, D. A., Ingram, J. M., Ervin, K. S., and Sheppard, L. A. (1996). Cognition, affect, and behavior in the prediction of group attitudes. *Pers. Soc. Psychol. Bull.* **22**, 306–316.
- Jamieson, D. W., Lydon, J. E., and Zanna, M. P. (1987). Attitude and activity preference similarity: Differential bases of interpersonal attraction for low and high self-monitors. *J. Pers. Soc. Psychol.* **53**(6), 1052–1060.
- Jones, E. E. (1979). The rocky road from acts to dispositions. *Am. Psychol.* **34**, 107–117.
- Jost, J. T., and Banaji, M. R. (1994). The role of stereotyping in system justification and the production of false consciousness. *Br. J. Soc. Psychol.* **22**, 1–27.
- Jost, J. T., and Kay, A. C. (2005). Exposure to benevolent sexism and complementary gender stereotypes: Consequences for specific and diffuse forms of system justification. *J. Pers. Soc. Psychol.* **88**, 498–509.
- Jost, J. T., Burgess, D., and Mosso, C. O. (2001). Conflicts of legitimation among self, group, and system: The integrative potential of system justification theory. In "The Psychology of Legitimacy" (J. Jost and B. Major, eds.), pp. 363–390. Cambridge University Press, Cambridge, England.

- Judd, C. M., Hawkins, L. J., Yzerbyt, V., and Kashima, Y. (2005). Fundamental dimensions of social judgment: Understanding the relations between judgments of competence and warmth. *J. Pers. Soc. Psychol.* **89**, 899–913.
- Karlins, M., Coffman, T. L., and Walters, G. (1969). On the fading of social stereotypes: Studies in three generations of college students. *J. Pers. Soc. Psychol.* **13**, 1–16.
- Katz, D., and Braly, K. (1933). Racial stereotypes of one hundred college students. *J. Abnorm. Soc. Psychol.* **28**, 280–290.
- Katz, I., and Hass, R. G. (1986). Racial ambivalence and value conflict: Correlational and priming studies of dual cognitive structures. *J. Pers. Soc. Psychol.* **55**, 893–905.
- Kay, A. C., and Jost, J. T. (2003). Complementary justice: Effects of “poor but happy” and “poor but honest” stereotype exemplars on system justification and implicit activation of the justice motive. *J. Pers. Soc. Psychol.* **85**, 823–837.
- Kerr, N. (2002). When is a minority a minority? Active versus passive minority advocacy and social influence. *Eur. J. Soc. Psychol.* **32**, 471–483.
- Kinder, D. R., and Sears, D. O. (1981). Prejudice and politics: Symbolic racism versus racial threats to the good life. *J. Pers. Soc. Psychol.* **40**, 414–431.
- Kinder, D. R., and Sears, D. O. (1985). Public opinion and political action. In “Handbook of Social Psychology” (G. Lindzey and E. Aronson, eds.), 3rd ed., Vol. 2, pp. 659–741. Random House, New York.
- Kinder, D. R., Peters, M. D., Abelson, R. P., and Fiske, S. T. (1980). Presidential prototypes. *Pol. Behav.* **2**, 315–337.
- Kitano, H. H. L., and Sue, S. (1973). The model minorities. *J. Soc. Issues* **29**, 1–9.
- Kitayama, S., Markus, H. R., Matsumoto, H., and Norasakkunkit, V. (1997). Individual and collective processes in the construction of the self: Self-enhancement in the United States and self-criticism in Japan. *J. Pers. Soc. Psychol.* **72**, 1245–1267.
- Kite, M., Deaux, K., and Miele, M. (1991). Stereotypes of young and old: Does age outweigh gender? *Psychol. Aging* **6**, 19–27.
- Koyano, W. (1989). Japanese attitudes toward the elderly: A review of research findings. *J. Cross Cult. Gerontol.* **4**, 335–345.
- Kubicka-Daab, J. (1989). Positivity and negativity effects in impression formation: Differences in processing information about ability and morality dispositions. *Polish Psychol. Bull.* **20**, 295–307.
- Lazarus, R. S., and Folkman, S. (1984). “Stress, Appraisal, and Coping.” Springer, New York.
- Lee, T. L., and Fiske, S. T. (2006). Not an outgroup, but not yet an ingroup: Immigrants in the stereotype content model. *Int. J. Intercult. Rel.* **30**, 751–768.
- Lerner, M. J., and Miller, D. T. (1978). Just world research and the attribution process: Looking back and ahead. *Psychol. Bull.* **85**, 1030–1051.
- Leslie, L. M., Constantine, V. S., and Fiske, S. T. (2007). Fourth in the Princeton quartet’s analyses of ethnic and national stereotypes: Private ambivalence moderates modern stereotype content 70 years later.
- Lin, M. H., Kwan, V. S. Y., Cheung, A., and Fiske, S. T. (2005). Stereotype content model explains prejudice for an envied outgroup: Scale of Anti-Asian American stereotypes. *Pers. Soc. Psychol. Bull.* **31**, 34–47.
- Linssen, H., and Hagendoorn, L. (1994). Social and geographical factors in the explanation of the content of European nationality stereotypes. *Br. J. Soc. Psychol.* **33**, 165–182.
- Lydon, J. E., Jamieson, D. W., and Zanna, M. P. (1988). Interpersonal similarity and the social and intellectual dimensions of first impressions. *Soc. Cogn.* **6**(4), 269–286.
- MacDonald, T. K., and Zanna, M. P. (1998). Cross-dimensional ambivalence toward social groups: Can ambivalence affect intentions to hire feminists? *Pers. Soc. Psychol. Bull.* **24**, 427–441.

- Mackie, D. M., and Smith, E. R. (1998). Intergroup relations: Insights from a theoretically integrative approach. *Psychol. Rev.* **105**, 499–529.
- Mackie, D. M., Devos, T., and Smith, E. R. (2000). Intergroup emotions: Explaining offensive action tendencies in an intergroup context. *J. Pers. Soc. Psychol.* **79**, 602–616.
- Maddux, W. W., Galinsky, A. D., Cuddy, A. J. C., and Polifroni, M. (2008). When being a model minority is good . . . and bad: Realistic threat explains negativity toward Asian Americans. *Pers. Soc. Psychol. Bull.* **34**, 74–89.
- Mandisodza, A. N., Fiske, S. T., and Chaiken, S. (2005). Warmth and competence link intra- and interpersonal evaluations.
- Massey, D. S. (2007). “Categorically Unequal: The American Stratification System.” Russell Sage, New York.
- Maykovich, M. (1972). Reciprocity in racial stereotypes: White, black, and yellow. *Am. J. Sociol.* **77**, 876–897.
- McAdams, D. P., Healy, S., and Krause, S. (1984). Social motives and patterns of friendship. *J. Pers. Soc. Psychol.* **47**, 828–838.
- McCann, R. M., and Giles, H. (2002). Ageism and the workplace: A communication perspective. In “Ageism” (T. D. Nelson, ed.), pp. 163–199. MIT Press, Cambridge, MA.
- Mikula, G., Scherer, K. R., and Athenstaedt, U. (1998). The role of injustice in the elicitation of differential emotional reactions. *Pers. Soc. Psychol. Bull.* **24**, 769–783.
- Mitchell, J. P., Banaji, M. R., and Macrae, C. N. (2005). General and specific contributions of the medial prefrontal cortex to knowledge about mental states. *NeuroImage* **28**, 757–762.
- Mummendey, A., and Wenzel, M. (1999). Social discrimination and tolerance in intergroup relations: Reactions to intergroup differences. *Pers. Soc. Psychol. Rev.* **3**, 158–175.
- Neuberg, S. L., and Cottrell, C. A. (2002). Intergroup emotions: A sociofunctional approach. In “From Prejudice to Intergroup Emotions: Differentiated Reactions to Social Groups” (D. Mackie and E. R. Smith, eds.). Psychology Press, New York.
- Oldmeadow, J., and Fiske, S. T. (in press). Ideology moderates status=competence stereotypes: Roles for belief in a just world and social dominance orientation. *Eur. J. Soc. Psychol.*
- Osgood, C., Suci, G. J., and Tannenbaum, P. (1957). “The Measurement of Meaning.” University of Illinois Press, Urbana, IL.
- Panksepp, J. (2000). The neurodynamics of emotions: An evolutionary-neurodevelopmental view. In “Emotion, Development, and Self-Organization: Dynamic Systems Approaches to Emotional Development” (M. D. Lewis and I. Granic, eds.), pp. 236–264. Cambridge University Press, New York.
- Parrott, W. G., and Smith, R. H. (1993). Distinguishing the experiences of envy and jealousy. *J. Pers. Soc. Psychol.* **64**, 906–920.
- Pasupathi, M., and Lockenhoff, C. E. (2002). Ageist behavior. In “Ageism: Stereotyping and Prejudice Against Older Persons” (T. Nelson, ed.), pp. 201–246. MIT Press, Cambridge.
- Peeters, G. (1983). Relational and informational pattern in social cognition. In “Current Issues in European Social Psychology” (W. Doise and S. Moscovici, eds.), pp. 201–237. Cambridge University Press, Cambridge.
- Peeters, G. (1992). Evaluative meanings of adjectives *in vitro* and in context: Some theoretical implications and practical consequences of positive-negative asymmetry and behavioral-adaptive concepts of evaluation. *Psychol. Belgic* **XXXII-2**, 211–231.
- Peeters, G. (1993). Self-other anchored evaluations of national stereotypes. Unpublished manuscript, Catholic University of Leuven, Leuven, Belgium.
- Peeters, G. (1995). What’s negative about hatred and positive about love? On negation in cognition, affect, and behavior. In “Perspectives on Negation” (H. C. M. de Swart, and L. J. M. Bergman, eds.), pp. 123–133. Tilburg University Press, Tilburg, The Netherlands.

- Peeters, G. (2001). From good and bad to can and must: Subjective necessity of acts associated with positively and negatively valued stimuli. *Eur. J. Soc. Psychol.* **31**, 125–136.
- Peeters, G. (2002). From good and bad to can and must: Subjective necessity of acts associated with positively and negatively valued stimuli. *Eur. J. Soc. Psychol.* **32**, 125–136.
- Pettigrew, T. F. (1979). The ultimate attribution error: Extending allport's cognitive analysis of prejudice. *Pers. Soc. Psychol. Bull.* **5**(4), 461–476.
- Phalet, K., and Poppe, E. (1997). Competence and morality dimensions in national and ethnic stereotypes: A study in six eastern-European countries. *Eur. J. Soc. Psychol.* **27**, 703–723.
- Plutchik, R. (1980). "Emotion: A Psychoevolutionary Synthesis." New York, Harper and Row.
- Poppe, E. (2001). Effects of changes in GNP and perceived group characteristics on national and ethnic stereotypes in central and eastern Europe. *J. Appl. Soc. Psychol.* **31**, 1689–1708.
- Poppe, E., and Linsen, H. (1999). In-group favouritism and the reflection of realistic dimensions of difference between national states in Central and Eastern European nationality stereotypes. *Br. J. Soc. Psychol.* **38**, 85–102.
- Reeder, G. D., Kumar, S., Hesson-McInnis, M. S., and Trafimow, D. (2002). Inferences about the morality of an aggressor: The role of perceived motive. *J. Pers. Soc. Psychol.* **83**, 789–803.
- Ridgeway, C. L. (2001). How do status beliefs develop? The role of resources and interactional experiences. In "The Psychology of Legitimacy: Emerging Perspectives on Ideology, Justice, and Intergroup Relations" (J. T. Jost and B. Major, eds.), pp. 257–277. Cambridge University Press, Cambridge, England.
- Roseman, I. J. (1984). Cognitive determinants of emotions: A structural theory. In "Review of Personality and Social Psychology" (P. Shaver, ed.), Vol. 5, pp. 11–36. Sage, Beverly Hills, CA.
- Roseman, I., Wiest, C., and Swartz, T. (1994). Phenomenology, behaviors, and goals differentiate discrete emotions. *J. Pers. Soc. Psychol.* **67**, 206–221.
- Rosen, B., and Jerdee, T. H. (1976a). The nature of job-related age stereotypes on managerial decisions. *J. Appl. Soc. Psychol.* **62**, 180–183.
- Rosen, B., and Jerdee, T. H. (1976b). Influence of age stereotypes on managerial decisions. *Journal of Applied Psychology* **61**, 428–432.
- Rosenberg, S., Nelson, C., and Vivekananthan, P. S. (1968). A multidimensional approach to the structure of personality impressions. *J. Pers. Soc. Psychol.* **9**, 283–294.
- Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. In "Advances in Experimental Social Psychology" (L. Berkowitz, ed.), Vol. 10, pp. 174–221. Academic Press, New York.
- Rozin, P., Lowery, L., Imada, S., and Haidt, J. (1999). The CAD triad hypothesis: A mapping between 3 moral emotions (contempt, anger, disgust) and 3 moral codes (community, autonomy, divinity). *J. Pers. Soc. Psychol.* **76**, 574–586.
- Rubin, K. H., and Brown, J. (1975). A life-span look at person perception and its relationship to communicative interaction. *J. Gerontol.* **30**, 461–468.
- Rubenstein, R. L. (1966). "After Auschwitz: Radical theology and contemporary Judaism." Bobbs-Merrill Educational Publishing, Indianapolis.
- Rudman, L. A., and Heppen, J. B. (2003). Implicit romantic fantasies and women's interest in personal power: A glass slipper effect? *Pers. Soc. Psychol. Bull.* **29**, 1357–1370.
- Rudman, L. A., and Glick, P. (2008). "The social psychology of gender: How Power and Intimacy Shape Gender Relations." New York, Guilford Press.
- Ruscher, J. B. (2001). "The Social Psychology of Prejudiced Communication." Guilford Press, New York.
- Rush, L. L. (1998). Affective reactions to multiple social stigmas. *J. Soc. Psychol.* **138**, 421–430.

- Russell, A. M., and Fiske, S. T. (2007). Interpersonal status and competition affect judgments of competence and warmth. Manuscript under review.
- Russell, A. M., Fiske, S. T., and Moore, G. (2007). Applying the stereotype content model to perceptions of mental illnesses. Manuscript under review.
- Sandmel, S. (1978). "Anti-Semitism in the New Testament?" Fortress Press, Philadelphia, PA.
- Scherer, K. R. (1988). "Facets of emotion: Recent research." Erlbaum, Hillsdale, NJ.
- Schütz, H., and Six, B. (1996). How strong is the relationship between prejudice and discrimination? A meta-analytic answer. *Int. J. Intercult. Rel.* **20**, 441–462.
- Sears, D. O. (1989). The person-positivity bias. *J. Pers. Soc. Psychol.* **44**, 233–250.
- Sedikides, C., Insko, C. A., and Schopler, J.-P., (Eds.). (1998). "Intergroup Cognition and Intergroup Behavior." Lawrence Erlbaum Associates, Inc., Mahwah, NJ.
- Sharps, M. J., Price-Sharps, J. L., and Hanson, J. (1998). Attitudes of young adults toward older adults: Evidence from the United States and Thailand. *Educ. Gerontol.* **24**, 655–660.
- Sidanius, J., and Pratto, F. (1999). "Social Dominance: An Intergroup Theory of Social Hierarchy and Oppression." Cambridge University Press, New York.
- Sinclair, L., and Fehr, B. (2005). Voice versus loyalty: Self-construals and responses to dissatisfaction in romantic relationships. *J. Exp. Soc. Psychol.* **41**, 298–304.
- Singer, M. S. (1986). Age stereotypes as a function of profession. *J. Soc. Psychol.* **126**, 691–692.
- Singh, R., and Teoh, J. B. P. (2000). Impression formation from intellectual and social traits: Evidence for behavioural adaptation and cognitive processing. *Br. J. Soc. Psychol.* **39**, 537–554.
- Skowronski, J. J., and Carlston, D. E. (1987). Social judgment and social memory: The role of cue diagnosticity in negativity, positivity, and extremity biases. *J. Pers. Soc. Psychol.* **52**, 689–699.
- Smith, R. H. (1991). Envy and the sense of injustice. In "The Psychology of Jealousy and Envy" (P. Salovey, ed.), pp. 79–99. Guilford Press, New York.
- Smith, R. H. (2000). Assimilative and contrastive emotional reactions to upward and downward social comparisons. In "Handbook of Social Comparison: Theory and Research" (J. Suls and L. Wheeler, eds.), pp. 173–200. Kluwer Academic/Plenum Publishers, New York.
- Smith, C. A., and Ellsworth, P. C. (1985). Patterns of cognitive appraisal in emotion. *J. Pers. Soc. Psychol.* **48**, 813–838.
- Smith, R. H., Parrott, W. G., Ozer, D., and Moniz, A. (1994). Subjective injustice and inferiority as predictors of hostile and depressive feelings of envy. *Pers. Soc. Psychol. Bull.* **20**, 705–711.
- Spears, R., and Manstead, A. S. (1989). The social context of stereotyping and differentiation. *Eur. J. Soc. Psychol.* **19**, 101–121.
- Spears, R., and Leach, C. W. (2004). Intergroup schadenfreude: Conditions and consequences. In "The social life of emotions: Studies in emotion and social interaction" (L. Z. Tiedens and C. W. Leach, eds.), pp. 336–355. Cambridge University Press, New York, NY.
- Spence, J. T., and Helmreich, R. L. (1979). The many faces of androgyny: A reply to Locksley and Colten. *J. Pers. Soc. Psychol.* **37**, 1032–1046.
- Spence, J. T., Helmreich, R. L., and Holahan, C. K. (1979). Negative and positive components of psychological masculinity and femininity and their relationships to self-reports of neurotic and acting out behaviors. *J. Pers. Soc. Psychol.* **37**, 1673–1682.
- Stangor, C., Sullivan, L. A., and Ford, T. E. (1991). Affective and cognitive determinants of prejudice. *Soc. Cogn.* **9**, 359–380.
- Staub, E. (1996). Cultural-societal roots of violence: The examples of genocidal violence and of contemporary youth violence in the United States. *Am. Psychol.* **51**, 117–132.

- Stephan, W. G., and Renfro, C. L. (2002). The role of threat in intergroup relations. In "From Prejudice to Intergroup Emotions: Differentiated Reactions to Social Groups" (D. M. Mackie and E. R. Smith, eds.), pp. 191–207. Psychology Press, New York.
- Stephan, W. G., and Stephan, C. W. (2000). An integrated threat theory of prejudice. In "Reducing Prejudice and Discrimination" (S. Oskamp, ed.), pp. 23–45. Erlbaum, Mahwah, NJ.
- Stipek, D. J., Weiner, B., and Li, K.-X. (1989). Testing some attribution–emotion relations in the People's Republic of China. *J. Pers. Soc. Psychol.* **56**, 109–116.
- Sue, S., and Kitano, H. H. L. (1973). Stereotypes as a measure of success. *J. Soc. Issues* **29**, 83–98.
- Sue, S., Sue, D. W., and Sue, D. W. (1975). Asian Americans as a minority group. *Am. Psychol.* **30**, 906–910.
- Sung, K. T. (2001). Elder respect: Exploration of ideals and forms in East Asia. *J. Aging Stud.* **15**, 13–26.
- Swim, J. K., and Sanna, L. J. (1996). He's skilled, she's lucky: A meta-analysis of observers' attributions for women's and men's successes and failures. *Pers. Soc. Psychol. Bull.* **22**, 507–519.
- Tafarodi, R. W., and Ho, C. (2006). Moral value, agency, and the measurement of self-esteem. In "Self-Esteem Issues and Answers: A Sourcebook of Current Perspectives" (M. H. Kernis, ed.), pp. 110–116. Psychology Press, New York, NY, US.
- Tajfel, H. (1981). "Human Groups and Social Categories." Cambridge University Press, Cambridge, England.
- Talaska, C. A., Fiske, S. T., and Chaiken, S. (2007). Predicting discrimination: A meta-analysis of the racial attitude-behavior literature. *Social Justice Research.*
- Tausch, N., Kenworthy, J., and Hewstone, M. (2007). The confirmability and disconfirmability of trait concepts revisited: Does content matter? *J. Pers. Soc. Psychol.* **92**, 542–556.
- Taylor, S. E. (1981). A categorization approach to stereotyping. In "Cognitive Processes in Stereotyping and Intergroup Behavior" (D. L. Hamilton, ed.), pp. 88–114. Erlbaum, Hillsdale, NJ.
- Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. In "Advances in Experimental Social Psychology" (L. Berkowitz, ed.), Vol. 21, pp. 181–227. Academic Press, San Diego, CA.
- Tesser, A., and Collins, J. E. (1988). Emotion in social reflection and comparison situations: Intuitive, systematic, and exploratory approaches. *J. Pers. Soc. Psychol.* **55**, 695–709.
- Thibaut, J. W., and Kelley, H. H. (1959). "The Social Psychology of Groups." Transaction Publishers, New Brunswick, NJ.
- Tien-Hyatt, J. L. (1986/87) Self-perceptions of aging across cultures: Myth or reality? *Int J. Aging Hum. Dev.* **24**, 129–148.
- Todorov, A., Mandisodza, A. N., Goren, A., and Hall, C. C. (2005). Inferences of competence from faces predict election outcomes. *Science* **308**, 1623–1626.
- Todorov, A., Gobbini, M. I., Evans, K. K., and Haxby, J. V. (2007). Spontaneous retrieval of affective person knowledge in face perception. *Neuropsychologia* **445**, 163–173.
- Triandis, H. C. (1995). "Individualism and Collectivism." Westview Press, Boulder, CO.
- Van Knippenberg, A., and Van Oers, H. (1984). Social identity and equity concerns in intergroup perceptions. *Br. J. Soc. Psychol.* **23**, 351–361.
- Vescio, T. K., Gervais, S. J., Snyder, M., and 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. *J. Pers. Soc. Psychol.* **88**, 658–672.
- Volpato, C., Durante, F., and Fiske, S. T. (2007). Using the stereotype content model to examine the evils of fascism: An archival approach. Unpublished manuscript, Università di Padova.



- Vonk, R. (1996). Negativity and potency effects in impression formation. *Eur. J. Soc. Psychol.* **26**, 851–865.
- Vonk, R. (1999). Effects of self-profitability and other-profitability on evaluative judgements of behaviours. *Eur. J. Soc. Psychol.* **29**, 833–842.
- Wang, J. W., and Cuddy, A. J. C. (2008). Good traits travel: The perceived transitivity of traits across social networks. Paper presented at the 9th Annual Meeting of the Society for Personality and Social Psychology, Albuquerque, NM.
- Weiner, B. (1980). A cognitive (attribution)-emotion-action model of motivated behavior: An analysis of judgements of help-giving. *J. Pers. Soc. Psychol.* **39**, 186–200.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychol. Rev.* **92**, 548–573.
- Weiner, B. (2005). "Social Motivation, Justice, and the Moral Emotions: An Attributional Approach." Lawrence Erlbaum, Mahwah, NJ.
- Weiner, B., Graham, S., and Chandler, C. (1982). Pity, anger, and guilt: An attributional analysis. *Pers. Soc. Psychol. Bull.* **8**, 226–232.
- Weiner, B., Perry, R. P., and Magnusson, J. (1988). An attributional analysis of reactions to stigmas. *J. Pers. Soc. Psychol.* **55**, 738–748.
- White, M. S. (1979). Measuring androgyny in adulthood. *Psychol. Women Q.* **3**, 293–307.
- Wiggins, J. S. (1979). A psychological taxonomy of trait-descriptive terms: The interpersonal domain. *J. Pers. Soc. Psychol.* **37**, 395–412.
- Williams, L. N., and Fiske, S. T. (2006). Applying the stereotype content model to intra-racial subgroups: Black people's perceptions about Black people. Unpublished manuscript.
- Willis, J., and Todorov, A. (2006). First impressions: Making up your mind after a 100-ms. exposure to a face. *Psychol. Sci.* **17**, 592–598.
- Wojciszke, B. (1994). Multiple meanings of behavior: Construing actions in terms of competence or morality. *J. Pers. Soc. Psychol.* **67**, 222–232.
- Wojciszke, B. (1997). Parallels between competence- versus morality-related traits and individualistic versus collectivistic values. *Eur. J. Soc. Psychol.* **27**, 245–256.
- Wojciszke, B. (2005a). Affective concomitants of information on morality and competence. *Eur. Psychol.* **10**, 60–70.
- Wojciszke, B. (2005b). Morality and competence in person and self perception. *Eur. Rev. Social Psychol.* **16**, 155–188.
- Wojciszke, B., and Klusek, B. (1996). Moral and competence-related traits in political perception. *Polit. Psychol. Bull.* **27**, 319–324.
- Wojciszke, B., Brycz, H., and Borkenau, P. (1993). Effects of information content and evaluative extremity on positivity and negativity biases. *J. Pers. Soc. Psychol.* **64**, 327–336.
- Wojciszke, B., Bazinska, R., and Jaworski, M. (1998). On the dominance of moral categories in impression formation. *Pers. Soc. Psychol. Bull.* **24**, 1245–1257.
- Wojciszke, B., Abele, A. E., and Baryla, W. (2007). Two dimensions of interpersonal attitudes: Liking depends on communion, respect depends on agency.
- Ybarra, O., and Stephan, W. G. (1999). Attributional orientations and the prediction of behavior: The attribution-prediction bias. *J. Pers. Soc. Psychol.* **76**, 718–727.
- Ybarra, O., Chan, E., and Park, D. (2001). Young and old adults' concerns about morality and competence. *Motiv. Emotion* **25**, 85–100.
- Yzerbyt, V., Provost, V., and Corneille, O. (2005). Not competent but warm . . . really? Compensatory stereotypes in the French-speaking world. *Group Proc. Intergroup Relat.* **8**, 291–308.
- Zajonc, R. B. (1998). Emotions. In "Handbook of Social Psychology" (D. T. Gilbert, S. T. Fiske, and G. Lindzey, eds.) 4th ed., Vol. 1, pp. 591–634. McGraw-Hill, Boston.
- Zanna, M. P., and Hamilton, D. L. (1972). Attribute dimensions and patterns of trait inferences. *Psychon. Sci.* **27**, 353–354.

- Zanna, M. P., and Hamilton, D. L. (1977). Further evidence for meaning change in impression formation. *J. Exp. Soc. Psychol.* **13**, 224–238.
- Zemore, S., and Cuddy, A. J. C. (2000). Elderly stereotype contents at the automatic level. Unpublished raw data.
- Zenner, W. P. (1987). Middleman minorities and genocide. In “Genocide and the Modern Age: Etiology and Case Studies of Mass Death” (I. Walliman and M. N. Dobkowski, eds.), pp. 253–281. Greenwood Press, New York.
- Zucker, G. S., and Weiner, B. (1993). Conservatism and perceptions of poverty: An attributional analysis. *J. Appl. Soc. Psychol.* **23**, 925–943.