Journal of Personality and Social Psychology
2003, Vol. 85, No. 5, 823–837

Copyright 2003 by the American Psychological Association, Inc.
0022-3514/03/$12.00 DOI: 10.1037/0022-3514.85.5.823

Complementary Justice: Effects of "Poor but Happy" and "Poor but Honest" Stereotype Exemplars on System Justification and Implicit Activation of the Justice Motive

Aaron C. Kay and John T. Jost
Stanford University

It was hypothesized that exposure to complementary representations of the poor as happier and more honest than the rich would lead to increased support for the status quo. In Study 1, exposure to "poor but happy" and "rich but miserable" stereotype exemplars led people to score higher on a general measure of system justification, compared with people who were exposed to noncomplementary exemplars. Study 2 replicated this effect with "poor but honest" and "rich but dishonest" complementary stereotypes. In Studies 3 and 4, exposure to noncomplementary stereotype exemplars implicitly activated justice concerns, as indicated by faster reaction times to justice-related than neutral words in a lexical decision task. Evidence also suggested that the Protestant work ethic may moderate the effects of stereotype exposure on explicit system justification (but not implicit activation).

> Lower income and status is more tolerable when one can believe that the rich are not receiving a happiness income commensurate with their money income. (Robert E. Lane, 1959, pp. 39–40)

> It is virtually a cliché in our culture to consider the poverty-stricken, or even the relatively deprived, as having their own compensating rewards. They are actually happy in their own way—carefree, happy-go-lucky, in touch with and able to enjoy the "simple pleasures of life". . . Some systems of religious belief see virtue in suffering, and assume restitution in later life. (Melvin Lerner, 1980, pp. 20–21)

Cultural depictions of the rich and poor in numerous works of literature, religion, and the mass media reflect a leveling tendency to ascribe virtues such as happiness and morality to the underprivileged and, conversely, vices such as misery, loneliness, and dishonesty to those who are blessed with material abundance. Celebrated novels, plays, and films that reinforce such complementary, offsetting stereotypes in which each group possesses its unique benefits and burdens include Dickens' *Great Expectations*, Moliere's *The Miser*, Fitzgerald's *The Great Gatsby*, Orson Welles's *Citizen Kane*, Herman Hesse's *Siddhartha*, and even Steve Martin's *The Jerk*. The sentimental fiction movement that dominated British literature of the 18th century churned out best sellers in which peasants were portrayed as relentlessly joyful and virtuous (e.g., Mackenzie, 1771/1967). An impoverished old man in Sterne's (1768) *A Sentimental Journey Through France and Italy*, for instance, declares that "a chearful [*sic*] and contented mind was the best sort of thanks to heaven that an illiterate peasant could pay" (p. 120). This literary form, which sometimes parodied its readers for their romanticization of the poor, culminated with Charles Dickens. In one of his best-known examples, Dickens (1843/1971) contrasts the rich, miserable Ebenezer Scrooge with the insolvent but cheery Cratchit family in *A Christmas Carol*:

> They were not a handsome family; they were not well dressed; their shoes were far from being water proof; their clothes were scanty and Peter might have known, and very likely did, the inside of a pawnbroker's. But they were happy, grateful, pleased with one another and contented with the time. (p. 99)

It has been a familiar cultural theme for centuries, then, that poverty has its rewards and affluence its drawbacks. These specific characterizations may be conspicuously Western, but general preferences to perceive balance and complementarity in the social world are present also in Taoist notions, most especially the dialectical relationship between elements of yin and yang and the "reconciliation of opposites."

Public opinion is another carrier of popular culture that often assumes that there is "an inverse relationship between satisfaction and standard of living" (Hunyady, 1998, p. 85). Theorists have occasionally speculated about the social and psychological functions of "poor but happy," "rich but miserable," "poor but honest," and "rich but dishonest" stereotypes (Jost, Burgess, & Mosso, 2001; Lane, 1959; Lerner, 1980). A provocative suggestion that

Aaron C. Kay, Department of Psychology, Stanford University; John T. Jost, Graduate School of Business, Stanford University.

Portions of this research were presented at the following conferences: International Society for Justice Research, Skövde, Sweden, June 2002; Person Memory Interest Group, Salt Fork, Ohio, October 2002; and the Nags Head Conference on the Justice Motive, Highland Beach, Florida, December 2002. This work was supported by the Graduate School of Business at Stanford University and the Radcliffe Institute for Advanced Study at Harvard University. We acknowledge Susan Andersen, Mahzarin Banaji, Monica Biernat, Ramona Bobocel, Ted Coons, Grainne Fitzsimons, Peter Glick, Carolyn Hafer, E. Tory Higgins, Orsolya Hunyady, Ian Kay, Rod Kramer, Arie Kruglanski, Mel Lerner, Hazel Markus, Lee Ross, Hal Sigall, Jim Sherman, Claude Steele, and Tom Tyler for extremely helpful suggestions concerning the ideas contained in this article.

Correspondence concerning this article should be addressed to either Aaron C. Kay, Department of Psychology, Jordan Hall, Building 420, Stanford University, Stanford, California 94305, or John T. Jost, who is now at the Department of Psychology, New York University, 6 Washington Place, New York, New York 10003-6634. E-mail: aaronk@psych.stanford.edu or john.jost@nyu.edu

emerges from these accounts is that the belief that "no one has it all" makes people feel better about their own position in society and increases the perceived legitimacy of the social system. Lane (1959), for example, argued on the basis of structured interviews that members of the working class rationalize their own state of relative disadvantage by clinging to the belief that in other domains—especially happiness and morality—they are subjectively equal to or even better off than elites. Similarly, in theorizing about the cognitive and motivational strategies that people follow in order to preserve the "belief in a just world" (BJW), Lerner (1980) observed that people seem to take comfort in images of the poor as relatively content and as waiting patiently to be rewarded in the afterlife for their moral assets. It is even conceivable that the ideological equation of poverty with virtue helps to explain the early appeal of Christianity among the lower classes of ancient Rome (e.g., Toynbee, 1947).

In this article, we conduct an empirical examination of the hypothesis that exposure to complementary "poor but happy" and "poor but honest" stereotype exemplars (as well as "rich but miserable" and "rich but dishonest" exemplars) leads to an increase in the perception that society is fair and inequality is legitimate, insofar as every "class gets its share" (Lane, 1959, p. 39). Jackman (1994) has advanced a parallel argument concerning the role of complementary gender stereotypes of men as agentic (but not communal) and women as communal (but not agentic) as contributing to the maintenance of traditional gender roles. Specifically, believing that women are relatively incompetent but also warm, friendly, caring, nurturant, honest, and morally superior allows people to rationalize the unequal distribution of social roles and to conceal the exploitative nature of gender relations in a patriarchal society. Glick and Fiske (2001) have found that complementary gender stereotypes are indeed widespread, endorsed by women as well as men, and especially prevalent in highly sexist societies (as measured by objective indicators pertaining to the social and economic advancement of women). In applying a similar logic to the case of stereotypical representations of the rich and poor, we demonstrate that the power of complementary stereotypes goes well beyond the realm of gender and may apply to many other groups that differ with respect to social or economic standing.

Despite active interest in the specific contents and psychological functions of social stereotypes in general (Fiske, Cuddy, Glick, & Xu, 2002; Jost & Banaji, 1994; Snyder & Miene, 1994) and gender stereotypes in particular (Eagly & Mladinic, 1993; Glick & Fiske, 2001; Hoffman & Hurst, 1990), no empirical research to date has directly investigated the hypothesis that offsetting, complementary representations of the rich (as dishonest or unfulfilled) and the poor (as happy or full of moral integrity) serve to increase perceptions of the fairness of the social system. Such representations need not capture the modal case in order to have their effects; it is likely that they reflect subtypes rather than default generalizations. In other words, it is not necessary that people believe that poor people are always (or even typically) happier or more honest than rich people in absolute terms[1] in order for salient "poor but happy" or "poor but honest" exemplars to increase their confidence in the legitimacy of the system. The main issue we address, therefore, is not whether people generally distinguish between the categories of rich and poor in terms of happiness and honesty, but rather the extent to which they feel better about the system after having been exposed to balanced, complementary pairings (poor/happy, rich/unhappy, poor/honest, and rich/dishonest). These conditions are contrasted with exposure to noncomplementary pairings (poor/unhappy, rich/happy, poor/dishonest, and rich/honest) in which the rich enjoy all the benefits and the poor suffer all the burdens.

Belief in a Just World (BJW) and the Protestant Work Ethic (PWE)

Lerner (1980) has argued that a universal human need exists to believe that outcomes are fair and just and that people "get what they deserve and deserve what they get." The central thesis is that living in an unpredictable, uncontrollable, and capriciously unjust world would be unbearably threatening, and so we cling defensively to the illusion that the world is a just place and that victims deserve their suffering (e.g., Lerner & Simmons, 1966). Twenty-five years ago, Lerner and Miller (1978) observed that insufficient attention in the research literature had been given to individual differences in BJW. Since that time, most of the studies in this area have focused on (a) correlates of individual differences in BJW (e.g., Furnham & Procter, 1989; Lipkus, Dalbert, & Siegler, 1996; Rubin & Peplau, 1975), and (b) the tendency to restore just world beliefs by derogating victims, including oneself (e.g., Hafer & Olson, 1989; Montada & Schneider, 1989; Reichle & Schmitt, 2002).

A common finding is that people (especially those who score high on BJW and those who lack the opportunity for prosocial action) tend to ascribe unfavorable traits to those who are less fortunate, such as the poor, thereby blaming them for their own misfortune (e.g., Furnham & Gunter, 1984). At least one study suggests that people who score high on BJW are also more likely than others to evince "halo effects" by ascribing favorable traits to fortunate target persons, such as physically attractive males (Dion & Dion, 1987). Although Lerner's (1980) theorizing makes clear that the derogation of low-status victims and the elevation of high-status actors are not the only ways in which people restore the sense of justice, research pointing to other cognitive mechanisms is scarce, especially—but by no means exclusively—with regard to justifying divisions of wealth.

The PWE, which has been described as one of America's "core values" (Katz & Hass, 1988), is even more strongly tied than the BJW to psychological responses to wealth and poverty. As Max Weber (1905/1958) pointed out, it is an ideology with religious origins and far-reaching social and economic consequences. The historical significance of the PWE, according to Mirels and Garrett (1971), is that it "provided a moral justification for the accumulation of wealth" but warned that "possession of capital was . . . a source of continual temptation to wanton self-indulgence" (p. 40). They noted that it was used by religious and other community leaders to encourage people to work hard through honest means

[1] One possibility is that people use "shifting standards" in estimating the happiness and honesty levels of rich and poor people (e.g., Biernat, Vescio, & Manis, 1998). For instance, people might have a lower threshold for ascribing happiness to poor targets, in comparison with rich targets. In this way, people might generally believe that the rich are happier than the poor and yet still encounter a reasonable number of individuals who seem to be "poor but happy."

and "to eschew immoderate consumption and participation in worldly pleasures" (p. 40). People who endorse the tenets of PWE believe that working hard is its own moral reward, whether or not it results in material success or other worldly benefits (Jones, 1997). Thus, PWE as an ideology has relatively direct (but opposite) relevance to dimensions of morality and happiness in relation to the accumulation of wealth.

As with the BJW, most of the research on the PWE has focused on individual differences that predict responses to victims. Studies have demonstrated that people who score high on PWE are more likely than people who score low on PWE to derogate members of disadvantaged groups such as African Americans and the obese (Biernat, Vescio, & Theno, 1996; Crandall, 1994; Katz & Hass, 1988; Quinn & Crocker, 1999). These findings are comparable with victim-blaming patterns manifested by people who score high on BJW (Furnham & Gunter, 1984; Hafer & Olson, 1989). A review of the research literature by Jones (1997) revealed that PWE is correlated with BJW (with most correlations ranging from .31 to .52) as well as with self-reported personal values of self-discipline, hard work, and honesty.

Given the pervasive focus on victim-blaming as a means of preserving the BJW and satisfying the PWE, it is not surprising that little systematic theory or research has been offered to address the effects of elevating the poor (and downgrading the rich) on subsequent perceptions of justice. If one assumes that there are many ways of satisfying the overarching goal of imbuing the social system with legitimacy—only some of which have to do with deservingness—then there must be other kinds of justifications (in addition to victim-blaming) that serve to increase support for the system (see also Jost & Major, 2001). One candidate for how to preserve legitimacy in the context of inequality is to make use of complementary stereotypes in which advantaged and disadvantaged group members are seen as possessing distinctive, offsetting strengths and weaknesses. This strategy is one that may work to increase support for the system even among people who are relatively low in BJW or PWE and therefore less likely than others to follow the path of victim derogation.

System Justifying Consequences of Complementary Stereotypes

Like just world theory, system justification theory emphasizes the human propensity to perceive existing social arrangements as fair, legitimate, and justified (Jost & Banaji, 1994; Jost et al., 2001). However, we do not see this propensity as driven solely (or even primarily) by the need for personal control or the desire for justice to be done. Rather, we conceive of it as rationalization of the status quo, as distinguished from rationalization on behalf of the self or one's group (Kay, Jimenez, & Jost, 2002).[2] Perceptions of individual and group deservingness constitute only a partial subset of the full range of consequences and manifestations of the system justification tendency, which also includes stereotypes, ideologies, and attitudes toward systems and authorities (e.g., Jost & Burgess, 2000; Jost, Pelham, Sheldon, & Sullivan, 2003; Jost & Thompson, 2000).

System-justifying variables—including individual differences in BJW and political conservatism—help to explain in-group ambivalence, out-group favoritism, depressed entitlement, and the internalization of inferiority among members of disadvantaged groups (e.g., Jost, Banaji, & Nosek, in press; Jost & Burgess, 2000; Jost et al., 2001; Jost & Thompson, 2000; Rudman, Feinberg, & Fairchild, 2002). At the same time, it is not only people who score high on BJW or PWE who want to feel that the extant system is fair and legitimate. People who score relatively low on dispositional measures such as these must also satisfy their system justification needs, although they may gravitate toward different means. Complementary stereotypes are less aversive and more socially desirable than straightforward victim derogation, and so they may appeal to people who score low (as well as high) on measures of BJW and PWE, in part because they lend legitimacy to the system without unequivocally stigmatizing any group.

In prior work, system justification has often been inferred from out-group favoritism and other group-level manifestations, and it has not been measured directly as an outcome variable (e.g., Jost & Burgess, 2000; Jost et al., 2001). This methodological limitation also applies to previous studies of stereotyping as rationalization (e.g., Eagly & Steffen, 1984; Glick & Fiske, 2001; Hoffman & Hurst, 1990). Consequently, there is no direct evidence in the published literature that exposure to specific kinds of stereotypes serves to increase ideological support for the existing social system. We used an experimental paradigm in the current research to present people with either complementary or noncomplementary stereotype exemplars and measured system justification directly to examine the hypothesis that exposure to "poor but happy" and "poor but honest" representations would increase support for the system (see also Jost & Kay, 2003).

Theoretical Differences Between Happiness and Honesty Dimensions

Following Lane (1959) and Lerner (1980), we hypothesize that exposure to "poor but happy" and "poor but honest" stereotypical representations serves to increase support for the status quo. We do not necessarily assume that *any* positive/negative pairing would have the same effect. "Poor but happy" and "poor but honest" representations are culturally meaningful associations, and the fact that they are stereotypes (or substereotypes) presumably contributes to their justifying potential (see also Jost & Kay, 2003). In advancing the hypothesis that these two types of representations are similar in terms of their consequences for system justification, we do not mean to suggest that the dimensions of happiness and honesty are equivalent in other ways. On the contrary, they differ in a number of theoretically interesting ways.

Studies of the actual relation between income and subjective well-being indicate that a positive (but modest) correlation exists between the two variables (Diener & Diener, 1995; Ryan & Deci,

[2] System justification is seen as comparable in its generality to ego justification (the motive to defend the interests and integrity of the self) and group justification (the motive to defend the interests and integrity of one's own group). It is important to note that system justification is not reducible to either ego or group justification. For members of disadvantaged groups, system justification tendencies may conflict with ego and group justification motives, resulting in attitudinal ambivalence, decreased self-esteem, and increased out-group favoritism (Jost & Burgess, 2000; Jost & Thompson, 2000).

2000). The reality is that the rich are at least somewhat happier than the poor in general, with respect to both within-country and between-country comparisons. As a result, "poor but happy" (and "rich but unhappy") stereotypes, if they are widely held, are false. The accuracy of "poor but honest" (and "rich but dishonest") stereotypes is harder to assess.

To the extent that "poor but happy" and "poor but honest" representations differ in terms of what people generally expect to be true, then they could evoke disparate responses as a result of expectancy violation. However, if they produce similar effects on system justification despite differences in expectations, then such effects will obviously not be attributable to arousal or other consequences of expectancy violation. Our pilot study assessed lay beliefs and expectations concerning the prevalence of complementary versus noncomplementary associations to rich and poor individuals.

Another potentially important difference is that happiness is clearly beneficial to the trait holder, whereas honesty may not be. That is, happiness may be "self-profitable" and honesty may be "other-profitable" (e.g., Vonk, 1999). This difference may mean that honesty will not be regarded as a compensating reward for poverty to the same degree that happiness will be. Although we agree that useful distinctions can be made between the two dimensions, our hypothesis is that the "virtue of poverty" also functions as a system-justifying ideology in part because it ascribes desirable characteristics to the dispossessed. Trait ratings obtained in Study 2 allow us to determine whether honesty is actually seen as benefiting the trait holder.

People who are high in PWE may devalue the pursuit of happiness and pleasure for its own sake while at the same time valuing the honesty dimension very highly (e.g., Jones, 1997; Mirels & Garrett, 1971). And, conversely, people who are low in PWE may see happiness as more important than hard work and honesty as irrelevant to material success. Thus, the dimensions of happiness and honesty may also be expected to differ in terms of their relation to PWE. The juxtaposition of Studies 3 and 4 allows us to explore these possibilities.

Finally, according to equity theory, balance theory, and many other social psychological perspectives that stress either halo effects or victim-derogation (e.g., Cooper, 1981; Crandall & Beasley, 2001; Dion & Dion, 1987; Furnham & Gunter, 1984; Heider, 1958; Lerner, 1980; Walster, Berscheid, & Walster, 1978), it seems more likely that a perfectly just system would be one in which "good" (honest) people are rewarded with wealth and happiness, whereas "bad" (dishonest) people are not. For a variety of reasons, then, it is a stringent test of our theory to hypothesize that exposure to "poor but honest" or "rich but dishonest" exemplars would serve to increase support for the system. Obtaining parallel results for the happiness and honesty dimensions, despite the evident differences between the two types of characteristics, would suggest that the effect of exposure to complementary stereotypes on system justification is relatively general and robust.

Implicit Activation of the Justice Motive

The term "justice motive" has been used to refer to a number of different but presumably related psychological phenomena, including (a) the genuine, unselfish desire to treat others fairly, (b) the tendency to scrutinize social outcomes to determine whether they meet prevailing standards of justice, and (c) the directional preference to believe that outcomes in specific instances are fair and deserved and therefore that prevailing standards have indeed been met (e.g., Hafer, 2000; Lerner, 1977, 1980, 2002; Montada, 2002). When the justice motive is threatened—as, for example, when one is confronted with a perfectly innocent but suffering victim who cannot be helped directly and whose perpetrator has not been "brought to justice"—it follows from just world theory that people will engage in a cognitive distortion of reality in order to make the situation of injustice appear to be more just (e.g., Lerner, 1980). It has been suggested that the justice motive may be activated automatically (at an implicit or nonconscious level of awareness) in response to social stimuli that threaten the BJW (e.g., Hafer, 2000; Lerner & Goldberg, 1999). Similarly, it has been argued that system justification occurs in the absence of conscious awareness (Jost, Pelham, & Carvallo, 2002; Rudman et al., 2002; Uhlmann, Dasgupta, Elgueta, Greenwald, & Swanson, 2002) and that it is exacerbated by threats to the legitimacy or stability of the existing social system (Jost & Hunyady, 2002).

Two experiments by Hafer (2000) support the notion that threatening the BJW implicitly activates justice concerns. She found that exposure to cases of innocent victims who received no retributive justice led people to show increased interference for justice-related words (relative to control words) in a modified Stroop task in which they were required to ignore the meaning and name only the color of the words. This procedure enabled Hafer to infer on the basis of reaction-time data that unjust situations pose a threat to the BJW and therefore stimulate increased accessibility of constructs related to justice and fairness.

Another common method of gauging construct accessibility, and therefore implicit activation, of threat-related concepts is to measure response latencies in lexical decision experiments in which people are asked to indicate, as quickly and accurately as they can, whether a given linguistic stimulus is a "word" or a "nonword" (e.g., Fischer & Bloom, 1979; Meyer & Schvaneveldt, 1971). Although this paradigm was originally designed as a tool for cognitive psychologists, it has been used extensively by social psychologists to measure a wide array of constructs and motivations (e.g., Baldwin, Fehr, Keedian, & Seidel, 1993; Bargh & Pietromonaco, 1982; Mikulincer, Birnbaum, Woddis, & Nachmias, 2000). For example, research on attachment theory suggests that lexical decision tasks are especially useful for measuring increased accessibility due to cognitive threat (Mikulincer, Gillath, & Shaver, 2002). Although the lexical decision paradigm is not identical to the Stroop methodology used by Hafer (2000), research indicates that word interference effects in Stroop tasks are due to the increased accessibility of constructs related to the specific source of threat, insofar as cognitive resources are mobilized to address the threat (MacLeod & Hodder, 1998; Mathews & MacLeod, 1985). Thus, we used a lexical decision task to determine whether exposure to noncomplementary representations of the rich as happier and more honest than the poor would stimulate increased justice concerns at the implicit level.

Overview of Research

Given the lack of extensive empirical research on "poor but happy" and "poor but honest" representations, we first set out to assess explicit beliefs concerning assumed relations between economic wealth and dimensions of happiness and morality. In a pilot study, we asked people to complete trait ratings for hypothetical target individuals who were described as either rich or poor. This enabled us to determine how common these specific forms of complementary representation are and how consistent they are with general expectations.

Next, drawing on just world and system justification theories, we hypothesized that exposing people to complementary exemplars (i.e., "poor but happy," "rich but miserable," "poor but honest," or "rich but immoral" individuals) would serve to increase perceptions that the status quo is fair, legitimate, and justifiable, relative to exposing people to noncomplementary exemplars. This hypothesis, which departs from equity, balance, and "just desserts" theories as well as expectations derived from the halo effect, was investigated in four experiments. Specifically, participants read about individual protagonists who were described as either rich or poor and (in Studies 1 and 3) as either happy or unhappy or (in Studies 2 and 4) as either honest or dishonest. Afterward, they completed an explicit measure of general system justification.

We also hypothesized that exposure to noncomplementary stereotype exemplars ("rich and happy," "poor and unhappy," "rich and moral," "poor and immoral") would implicitly activate justice-related concerns (see Hafer, 2000), insofar as they threaten the legitimizing belief that "no one has it all." This hypothesis was examined with the use of lexical decision tasks in Studies 3 and 4 to explore the cognitive processes involved in implicit as well as explicit forms of system justification. We also examined the possibilities that individual differences in the PWE and family income would moderate the effects of stereotype exposure on system justification.

Pilot Study

We conducted a pilot study involving 88 undergraduate students to assess lay beliefs concerning the perceived relation between poverty/wealth and personal characteristics such as happiness and honesty. Approximately half of the participants ($n = 42$) were instructed to "assume that all you know about a person is that he or she is very *poor*," and the other half ($n = 46$) to "assume that all you know about a person is that he or she is very *wealthy*." Participants in both conditions were then asked, "How likely or unlikely is it that he or she possesses each of the following *traits*?" Twenty traits were presented, including *happy*, *unhappy*, *likeable*, *honest*, and *immoral*. Ratings were given on 9-point scales ranging from −4 (*extremely unlikely*) to 4 (*extremely likely*).

Results indicated that, in comparison with the wealthy target person, the poor target person was assumed to be significantly more honest ($M = .62$ vs. $-.33$), $t(86) = 3.42$, $p < .001$, and less immoral ($M = -.43$ vs. .39), $t(86) = 3.73$, $p < .001$. Thus, with respect to morality, the complementary stereotype seemed to be prevalent. The poor target was also judged to be significantly more likeable ($M = .60$) than the rich target ($M = .002$), $t(86) = 2.30$, $p < .03$.[3]

However, the poor target person was not assumed to be happier than the wealthy target person. Rather, the poor individual was assumed to be significantly less happy (Ms $= -.67$ vs. .63) and more unhappy (Ms $= .90$ vs. $-.04$) than the affluent individual, $t(86) = 4.87$, $p < .001$ and $t(86) = 4.01$, $p < .001$, respectively. Lay beliefs seem to reflect the actual relation between income and subjective well-being (Diener & Diener, 1995; Ryan & Deci, 2000).

The pilot study confirms that people's explicit beliefs about the prevalence of "poor but happy" and "poor but honest" stereotype exemplars do differ considerably. The former subtype, it may be inferred, is believed to be rarer than the latter. Among other things, this means that exposing people to "poor but honest" exemplars is consistent with their expectations, whereas exposing them to "poor but happy" exemplars is inconsistent with their expectations. Demonstrating that exposure to both types of exemplars leads to increased system justification, therefore, would suggest that system-justifying effects are due to complementarity rather than to surprise or other forms of arousal associated with expectancy disconfirmation.

Study 1

The purpose of this first study was to examine the impact of "poor but happy" and "rich but unhappy" stereotype exemplars on explicit system justification. Under the guise of an impression formation task, participants first read about an individual protagonist varying in wealth (rich vs. poor) and happiness (happy vs. unhappy). Thus, the design was a 2 × 2 factorial. Afterward, participants completed an eight-item scale measuring system justification. An interaction effect between wealth and happiness was hypothesized, such that system justification scores would be higher when the poor protagonist was described as happy rather than unhappy and when the rich protagonist was described as unhappy rather than happy.

Method

Research participants. Participants were 47 Stanford University undergraduates who received course credit in exchange for their participation. The sample was comprised of 20 men and 27 women ranging in age from 18 to 24. In terms of racial/ethnic background, 23 participants (48.9%) identified themselves as European American, 12 (25.5%) as Asian or Asian American, 5 (10.6%) as Latino, 3 (6.4%) as African American, and 2 (4.3%) as "Other." Two other participants (4.3%) declined to provide this information.

Procedure. The experiment was run under the guise of two separate studies. In the "first study," which ostensibly involved an impression formation task, participants were asked to read a short vignette about a character named Mark, who was described as either rich + happy, rich + unhappy, poor + happy, or poor + unhappy. The wording of the vignette was as follows:

> Mark is from a large Northeast city. He is married and has two children, has brown hair and is 5 feet 11 inches. Mark was an athletic

[3] Consistent with prior research on stereotypical attributions for wealth and poverty, the wealthy target person was also assumed to be more intelligent, hard-working, ambitious, competent, motivated, responsible, organized, articulate, and self-assured in comparison with the poor target person.

child and still closely follows all his local sports teams. Mark *enjoys almost all aspects of his life* [is not particularly happy with most aspects of his life], *and* [but] because of his *low* [high] salary, he *has* [has no] trouble getting the bills paid and keeping food on the table. In June, Mark will be turning 41.

After reading this passage, participants were asked to rate how likely or unlikely they thought it was that Mark was also: arrogant, attractive, charitable, content, corrupt, dishonest, ethical, funny, generous, greedy, honest, immoral, intelligent, likeable, modest, moral, religious, socially competent, stupid, and unfulfilled. All ratings were made on 9-point scales ranging from 1 (*very unlikely*) to 9 (*very likely*). In addition to strengthening the cover story, several of these trait ratings allowed us to check on the manipulation of perceived happiness.

In the "second study," participants were asked to complete an eight-item questionnaire measuring perceptions of the fairness, legitimacy, and justifiability of the prevailing social system. The scale was constructed for this research program in order to measure situational (rather than dispositional, as in BJW or PWE scales) effects on system justification (see also Jost & Kay, 2003). Items were as follows: "In general, you find society to be fair," "In general, the American political system operates as it should," "American society needs to be radically restructured" (reverse-scored), "The United States is the best country in the world to live in," "Most policies serve the greater good," "Everyone has a fair shot at wealth and happiness," "Our society is getting worse every year" (reverse-scored), and "Society is set up so that people usually get what they deserve." Participants initially indicated their degree of agreement or disagreement with each item on a 9-point scale ranging from 1 (*strongly agree*) to 9 (*strongly disagree*), but the scores were recoded prior to analyses so that higher scores would indicate increased levels of system justification. A mean system justification score was calculated for each participant by collapsing across the eight items, which formed a reliable scale ($\alpha = .87$).

Independent validation of the system justification scale. To assess convergent and discriminant validity of the eight-item system justification scale, we administered the scale to an additional sample of 117 research participants (60 men and 57 women) along with (a) Lipkus's (1991) seven-item Global BJW scale ($\alpha = .88$) and (b) a scale that we constructed to measure general beliefs concerning the need for "balance" and "complementarity" in the social world ($\alpha = .56$). For the latter, we asked participants to indicate (on a 7-point scale) their degree of agreement with each of the following items: "All in all, the world is a 'balanced' place," "Some people have everything, while others have nothing" (reverse-scored), "A person who has recently experienced a string of bad breaks probably has something good coming to him or her," "Masculine traits perfectly complement feminine traits (and vice versa)," "I agree with people who say that 'everything comes out even in the end,'" "The dice are basically 'loaded'; positive outcomes are distributed disproportionately to the 'winners' in society" (reverse-scored), "Most people have both good and bad characteristics," "Everything has its advantages and its disadvantages," and "The social world is almost never in a state of 'harmony' or 'equilibrium'" (reverse-scored).

In terms of bivariate correlations, scores on the system justification scale reliably predicted scores on the need for "balance" questionnaire, $r(117) = .37$, $p < .001$ and, more strongly, BJW scores, $r(117) = .67$, $p < .001$. In terms of partial correlations, system justification remained a modest significant predictor of "balance" scores, $r(114) = .21$, $p < .03$, after controlling for BJW, and it was still a reasonably strong predictor of BJW, $r(114) = .62$, $p < .001$, after controlling for "balance." The significant bivariate relation between "balance" and BJW, $r(117) = .34$, $p < .001$, however, virtually disappeared after controlling for system justification scores, $r(114) = .13$, $p = .15$. These findings suggest that the measure of system justification does exhibit convergent validity with other conceptually related measures but that it is not redundant with neighboring constructs.

Results and Discussion

Manipulation check. Trait ratings of the protagonist demonstrate that the manipulation of perceived happiness was successful. In comparison with the unhappy protagonist, the happy protagonist was rated as more content ($M = 5.35$ vs. 3.83), likeable ($M = 6.04$ vs. 4.83), and funny ($M = 5.65$ vs. 4.75), and he was seen as less unfulfilled ($M = 4.04$ vs. 5.54). Each of these comparisons attained significance by a t test ($p < .03$, two-tailed).

With regard to other trait ratings, the happy versus unhappy protagonist was also seen as significantly more charitable ($M = 4.61$ vs. 3.92), socially competent ($M = 6.00$ vs. 5.04), and modest ($M = 5.57$ vs. 4.54), and he was seen as less arrogant ($M = 3.87$ vs. 5.25; $p < .05$ for all comparisons). There were no reliable differences between happy and unhappy conditions for ratings of honesty ($M = 5.68$ vs. 5.33), morality ($M = 5.57$ vs. 5.17), or any of the other dimensions.

Effects of stereotype exposure on system justification. To examine the effect of exposure to stereotype exemplars on system justification, a 2 (rich vs. poor) $\times$ 2 (happy vs. unhappy) analysis of variance (ANOVA) was conducted. Control variables for age, gender, and race/ethnicity were also included in the model. None of the demographic variables exerted reliable main or interaction effects on system justification, and the pattern of results was identical whether or not demographic variables were included and whether race/ethnicity was coded as having two levels (European American vs. minority/other) or five levels (as originally reported).[4]

No main effects of wealth or happiness of the protagonist were obtained. As predicted, wealth and happiness variables interacted to predict system justification scores, $F(1, 38) = 6.23$, $p < .02$. As illustrated in Figure 1, exposure to a "poor but happy" stereotype exemplar led to stronger significantly higher system justification ($M = 4.92$) than did the "poor and unhappy" exemplar ($M = 3.77$), $t(22) = 1.92$, $p = .07$, two-tailed. By contrast, exposure to a "rich and happy" exemplar led to weaker system justification ($M = 3.56$) than did exposure to a "rich but unhappy" exemplar ($M = 4.48$), $t(21) = 2.64$, $p < .02$. Thus, results supported the hypothesis that people would perceive the system to be more fair and legitimate following exposure to complementary rather than noncomplementary pairings. To our knowledge, this is the first conclusive evidence to support the contentions of Lane (1959) and Lerner (1980) that the "poor but happy" and "rich but miserable" stereotype reinforces the belief that social and economic outcomes are fair and just.

Study 2

In Study 2, we used comparable methods to assess the system justifying potential of "poor but honest" and "rich but dishonest" stereotypes. As Lerner (1980) and others have observed, religions often encourage the impoverished to tolerate their life circumstances on earth and to lead moral lives so that they may be compensated in the afterlife. Thus, believing that the poor are more

[4] The results we present here are for the analysis in which age, gender, and race/ethnicity (five levels) are controlled for as main effect variables. Means that we report are unadjusted by demographic variables.

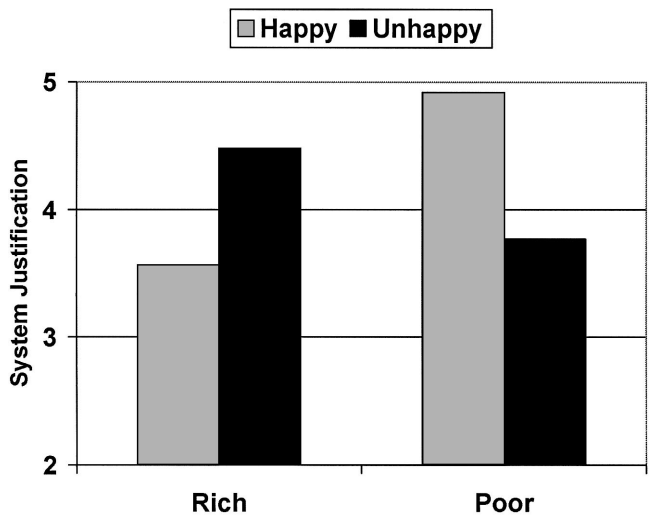

Figure 1. Effects of exposure to rich versus poor protagonists who are described as happy versus unhappy on system justification (Study 1).

honest or ethical than the rich might lead people to express more satisfaction with the status quo. This hypothesis departs from intuitive expectations derived from equity, balance, and victim derogation theories, all of which would suggest that people would perceive the social system to be most fair when the economically disadvantaged are also seen as dishonest or otherwise immoral and therefore deserving of their misfortune. Thus, crossing dimensions of wealth and morality in an experimental design provides a more stringent test of our hypothesis than in the first study.

Method

Research participants. Participants were 102 people who were recruited through flyers and advertisements placed on and around the Stanford University campus. Of the 94 who elected to indicate their gender, 59 were women and 35 were men. Their ages ranged from 18 to 47, with a mean of 20.5 years. Racial/ethnic composition of the sample was as follows: 53 participants (or 52%) identified themselves as European American, 8 (7.8%) as African American, 24 (23.5%) as Asian or Asian American, 6 (5.9%) as Latino, 1 (1%) as Indian/Native American, and 7 (6.9%) as "Other." Three others (2.9%) declined to indicate racial/ethnic identification. Participants were paid $20 in exchange for completing a series of questionnaires.

Procedure. The procedure from Study 1 was modified slightly, so that the protagonist for the impression management phase of the study was described as either rich or poor and as either honest or dishonest, according to a 2 × 2 factorial design. The vignette for Study 2 was as follows:

> George is from a large Northeast city. He is married and has two children, has brown hair and is 5 feet 11 inches. George was an athletic child and still closely follows all his local sports teams. George *sometimes* [never] cuts corners, and other people consider him to be *somewhat dishonest* [very honest]. Because of his *low* [high] salary, he *has* [has no] trouble getting the bills paid and keeping food on the table. In June, George will be turning 38.

After reading this passage and completing the same 20 trait ratings, participants completed the same system justification scale (α = .75) administered in Study 1.

Results and Discussion

Manipulation check. Trait ratings of the protagonist confirm that the honesty manipulation was successful. In comparison with the dishonest protagonist, the honest protagonist was rated as more ethical (M = 6.72 vs. 4.07), more religious (M = 6.02 vs. 4.29), less corrupt (M = 2.48 vs. 5.73), less greedy (M = 3.35 vs. 5.71), less dishonest (M = 2.48 vs. 6.04), and less immoral (M = 2.50 vs. 5.23). In all cases, $p < .001$ for t tests (two-tailed) comparing the two conditions.

Does honesty benefit the trait holder? Although one could argue that honesty is not a self-profitable trait and does not affect life outcomes in the same way that happiness does, results indicated that the protagonist was seen as having certain advantages in the honest condition that he lacked in the dishonest condition.

Specifically, the honest (vs. dishonest) protagonist was rated as happier (M = 6.28 vs. 5.02), more content (M = 5.93 vs. 4.70), more likeable (M = 6.96 vs. 5.21), more generous (M = 6.15 vs. 4.41), less stupid (M = 3.22 vs. 4.14), less arrogant (M = 3.35 vs. 6.27), and less unfulfilled (M = 4.28 vs. 5.18; in all cases, $p < .02$ for pairwise comparisons). Thus, it would appear that honesty is an attribute that is seen as benefiting the trait holder in terms of subjective well-being and improved social relationships; in this sense, it seems to be self-profitable as well as other-profitable. Even more specifically, these results suggest that "poor but honest" stereotype exemplars may also cue "poor but happy" associations. There were no reliable differences in the degree to which the protagonist was rated as attractive, intelligent, or funny in the honest versus dishonest conditions.

Effects of stereotype exposure on system justification. To examine the effects of perceived wealth (rich vs. poor) and honesty (honest vs. dishonest) of the protagonist on subsequent system justification scores, a 2 × 2 ANOVA was conducted. None of the demographic variables (alone or in combination) exerted reliable effects on the dependent variable, and the pattern was the same whether or not they were included in the model. Control variables for age, gender, and race/ethnicity (six levels) as main effects were included in the final model reported here (but interactions involving demographic variables were not). Means are unadjusted by demographic variables.

No main effects attained significance, but, as hypothesized, a two-way interaction between wealth and honesty was observed, $F(1, 85) = 4.95$, $p < .03$. As can be seen in Figure 2, participants who were exposed to "poor but honest" exemplars showed marginally higher levels of system justification (M = 4.75) than did participants who were exposed to "poor and dishonest" exemplars (M = 4.14), $t(50) = 1.73$, $p = .09$. At the same time, participants who were presented with a "rich and honest" exemplar showed lower levels of system justification (M = 4.23) compared with participants who were presented with a "rich but dishonest" exemplar (M = 4.88), $t(48) = 2.00$, $p = .05$. Thus, the pattern of results for complementary and noncomplementary stereotypes in the domain of morality parallel those obtained in the domain of happiness. People do report perceiving that the social system is more fair, legitimate, and justifiable following exposure to "poor + honest" and "rich + dishonest" actors than following exposure to "poor + dishonest" and "rich + honest" actors.

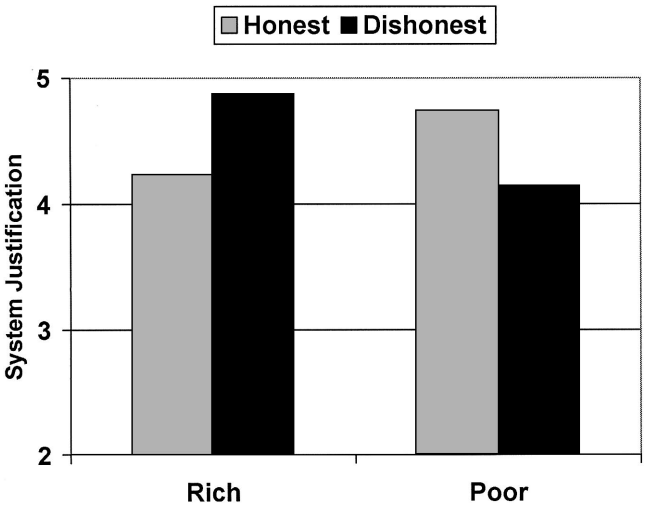

Figure 2. Effects of exposure to rich versus poor protagonists who are described as honest versus dishonest on system justification (Study 2).

Study 3

Overview

In the final two studies, we replicate and elaborate on the findings from the previous studies by investigating the possibility that noncomplementary stereotypes threaten and complementary stereotypes satisfy justification needs at an implicit or nonconscious level of awareness. Specifically, we used a lexical decision task to assess the implicit activation of justice-related constructs. The use of this method in Studies 3 and 4 should dispel any social desirability concerns associated with our use of explicit measures of system justification in the first two studies. It should also shed light on cognitive processes involved in system-justifying responses to complementary and noncomplementary stereotype exemplars. A secondary goal of these studies was to investigate the potential role of the PWE in moderating the system-justifying effects of complementary stereotypes.

Past research has shown that situations perceived as unjust lead to increased activation of the justice motive, and that this increased activation can be measured in terms of increased accessibility to justice-related words (Hafer, 2000). On the basis of theory and evidence from Studies 1 and 2, we hypothesized that noncomplementary depictions of the rich as happier than the poor (and the rich as more moral than the poor) would threaten the belief that the system is just and therefore lead to increased activation of justice-related (but not neutral) words.

In addition, we sought to determine whether the individual difference variable of PWE would moderate the effects observed in the first two studies. Specifically, we considered the possibility that exposure to "poor but happy" stereotypes would be especially effective at increasing system justification among people who score relatively low on PWE (and are therefore less likely to prefer victim derogation as a strategy for satisfying system justification needs). We also obtained self-report measures of family income to determine whether the pattern of results would depend on the socioeconomic status of the respondent, as suggested by Lane (1959).

Method

Research participants. Fifty participants (31 women and 19 men, ranging in age from 18 to 30) were recruited through public advertisements placed throughout Stanford University and Palo Alto, California. Participants disclosed their approximate family income by checking one of nine different categories. In terms of broader frequency distributions, 10 (or 20%) of the participants reported a family income of under $50,000, 24 (48%) reported a family income between $50,000 and $150,000, and 16 (32%) reported a family income of over $150,000. All participants were paid $10 in exchange for their participation in the 30-min study.

Procedure. Upon arrival at the laboratory, participants were informed that the experiment involved measuring verbal memory and reasoning. They were then asked to read a story about two friends and told that they would be tested on their memory for the story later in the experiment. Participants were asked to read the story as many times as necessary to memorize the main details.

As in the previous studies, the experimental manipulation was embedded in the vignette. Half of the participants read about a rich target person who was happier than his poor friend, and half of the participants read about a poor target person who was happier than his rich friend. Thus, there were two (rather than four) conditions of this experiment. The first part of the vignette was the same in both conditions:

> Joseph and Mitchell both grew up in the midwestern United States and now both live in Seattle. Joseph is 39 and Mitchell is 41. Joseph and Mitchell met in their twenties, were good friends for almost ten years afterwards, but now because of their work schedules, they have lost touch over the last few years. Joseph has an excellent job now, lives in a beautiful, spacious house in a lavish neighborhood, and makes a very large salary. Mitchell spends a lot of his time watching and playing sports, but unlike Joseph, his job doesn't pay him much, so his home, which is in a rather inexpensive part of town, is a bit cramped and not very nice-looking.

In the "poor happier than rich" (complementary) condition, the story concluded with the following:

> Despite Mitchell's smaller house and lower salary, he tends to be much happier with his life than Joseph is. Mitchell enjoys most aspects of his life and is known amongst his friends as that guy who's always "broke but happy." Joseph, on the other hand, lacks the feeling of general contentment that Mitchell has and is often thought of as that "rich but miserable guy."

By contrast, the passage in the "rich happier than poor" (noncomplementary) condition ended this way:

> Not only does Mitchell have a smaller house and lower salary than Joseph, he also tends to be much less happy with his life than Joseph is. Joseph enjoys most aspects of his life and is known amongst his friends as that guy who "has it all." Mitchell, on the other hand, lacks the feeling of general contentment that Joseph has and is often thought of as that "broke, miserable guy."

After participants reassured the experimenter that they were "comfortable" with their understanding of the contents of the story, they were asked to complete a test of their verbal ability on the computer ostensibly "before the memory test." The test of verbal ability was in fact a lexical decision task that was used to measure the degree to which reading the stories had activated the justice motive.

The lexical decision task was conducted on a Pentium Dell-PC with a Super Video Graphics Array (SVGA) color monitor, and it was programmed using Superlab software (1997). The target letter strings were displayed in black lettering on a white background in the center of the computer screen. Participants were permitted to work at their own pace. They first completed 12 practice trials and then 87 experimental trials. The words and nonwords in the practice trials were different from those in the experimental trials. Each trial consisted of the presentation of one of 59 target letter strings. Participants judged as quickly as possible whether the letter string was a word by pressing a key labeled *word* (the *A* key) if they thought the string was a word or by pressing the key labeled *nonword* (the *L* key) if they thought that it was not a word.

For each trial, participants were exposed to one of the following: (a) a nonword (36 letter strings generated by changing one letter in randomly selected words, with each string shown only once), (b) a neutral or control word (e.g., *volume*, *finger*, *calendar*, *candle*, with each word shown six times), or (c) a justice-related word (*fair*, *legitimate*, *just*, *valid*, *justified*, with each word shown three times). To compare familiarity ratings of neutral and justice-related words, we consulted an online version of Coltheart's (1981) MRC Psycholinguistic Database at http://www.psy.uwa.edu.au/ mrcdatabase/uwa_mrc.htm. Words indexed in this database range from 100 to 700 in terms of familiarity ($M = 488$, $SD = 99$). The words we used were close to the population mean, with neutral words ($M = 549$) being slightly more familiar than justice-related words ($M = 505$).

Justice-related words were the focal target words for examining the hypothesized association between the complementary and noncomplementary conditions and the accessibility of justice-related concepts. Neutral words were introduced to control for unforeseen and nonspecific effects of the primes on lexical decisions. Comparisons between the two types of words were made in a within-participants fashion. Mean response latencies were calculated for each participant by averaging across trials within each category of word stimuli.[5]

Participants were also asked to complete pencil-and-paper measures, including the same (explicit) system justification scale ($\alpha = .86$) used in the first two studies. In addition, they completed Quinn and Crocker's (1999) 16-item PWE scale containing some items used in previous research (Katz & Hass, 1988; Mirels & Garrett, 1971) and five additional "modernized" items. Sample items include: "A distaste for hard work usually reflects a weakness of character," "Anyone who is willing and able to work hard has a good chance of succeeding," "The person who can approach an unpleasant task with enthusiasm is the person who gets ahead," and "Getting ahead is a matter of working hard and relying only on yourself." As in previous research, a median split was performed to divide the sample into high and low PWE scorers ($\alpha = .74$). After completing all of the above tasks, participants were debriefed and probed for awareness or suspicion of the hypothesized connection between the independent and dependent variables. None of the participants was able to guess the goals or hypotheses of the study.

Results and Discussion

Effects on explicit system justification. To examine the effects of stereotype exposure and PWE on explicit system justification scores, a 2 (complementary vs. noncomplementary representation) × 2 (high vs. low PWE) ANOVA was conducted. Control variables for gender, age, and income (nine levels) were also included in the model. A main effect of age indicated that older participants scored higher on system justification than did younger participants, $F(1, 43) = 5.54$, $p < .03$. A main effect of income revealed that participants from wealthier families scored higher on system justification than did participants from poorer families, $F(1, 43) = 5.33$, $p < .03$.[6] Gender was unrelated to system justification.

The analysis yielded a significant main effect of PWE, demonstrating that high PWE participants generally scored higher on system justification than did low PWE participants, $F(1, 43) = 9.19$, $p < .005$. This finding provides some indication that our measure of system justification possesses construct validity (as well as reliability); the zero-order correlation between system justification and PWE was .45. A marginal interaction between PWE and stereotype condition was also observed, $F(1, 43) = 3.90$, $p < .06$.[7]

As can be seen in Figure 3, the effect of exposure to "poor but happy/rich but miserable" exemplars on explicit system justification was more pronounced for people who scored low than high on PWE. For low PWE scorers, system justification was marginally higher in the complementary condition ($M = 5.55$) than in the noncomplementary condition ($M = 4.66$), $t(23) = 1.81$, $p = .08$. For high PWE scorers, by contrast, system justification was relatively high in both complementary ($M = 5.70$) and noncomplementary conditions ($M = 5.98$) and unaffected by experimental condition, $t(23) = .62$, $p = .54$.

Effects on implicit activation of the justice motive.[8] With respect to implicit measures, we hypothesized that exposure to noncomplementary stereotype exemplars would threaten the belief

[5] Following standard procedures for analyzing reaction-time data, mean response latencies exceeding three standard deviations from the grand mean were removed, resulting in the loss of just 1 participant. Thus, the final sample size was 49. To adjust for skewness in reaction-time data, responses were log-transformed prior to conducting significance tests (although results were similar whether the data were transformed or not). For ease of interpretation, we present original (rather than transformed) means in figures and the text.

[6] We also conducted additional regression analyses to determine whether the effect of exposure to complementary versus noncomplementary stereotype exemplars on system justification was moderated by income (nine levels). We found no evidence that it was. Specifically, there were no two-way (Condition × Income) or three-way (Condition × Income × PWE) interaction effects that attained statistical significance in any of the analyses we conducted for Studies 3 or 4.

[7] The interaction effect between PWE and exposure to stereotype exemplars should be interpreted with caution. When PWE was treated as a continuous variable in regression analyses for Studies 3 and 4, results were substantially weaker. Specifically, for Study 3 the PWE × Condition interaction attained marginal significance ($\beta = .65$), $t(42) = 1.69$, $p < .10$, in only one analysis (which also controlled for a nonsignificant Income × Condition interaction term). Regression analyses for Study 4 failed to replicate the PWE × Condition interaction effect.

[8] As a general rule, implicit and explicit measures of system justification were uncorrelated in Studies 3 and 4, suggesting that a dual-process model may be appropriate (e.g., Lerner & Goldberg, 1999). One potentially interesting finding that emerged from Study 3, however, was that the partial correlation between explicit system justification and (log-transformed) reaction times to recognize justice-related words (controlling for neutral words) was positive and significant for low PWE respondents, partial $r(22) = .47$ ($p < .02$), but it was negative for high PWE respondents, partial $r(22) = -.23$ ($p = .29$). That is, explicit system justification was associated with slower responses to justice-related words for low PWE but not high PWE respondents. These two correlations were significantly different from one another ($Z = 2.29$, $p = .02$, two-tailed). In Study 4, the corresponding correlations, $r(24) = .07$ and $r(21) = -.07$, respectively, did not differ from one another ($Z = .44$, $p = .67$, two-tailed).

in the justice of the system and therefore lead to faster reaction times for justice-related words (but not for neutral words), in comparison with (nonthreatening) complementary stereotype exemplars. A 2 (complementary vs. noncomplementary representation) × 2 (high vs. low PWE) × 2 (response latency to justice-related vs. neutral target word stimuli) mixed model ANOVA was conducted, with repeated measures on the last factor. Control variables for gender, age, and income (nine levels) were also included in the model. None of these demographic variables exerted reliable effects on the dependent variable of log-transformed reaction time in milliseconds. Nor were any main or interaction effects of PWE observed on implicit responses.

No main effects of experimental condition or word type were obtained. The analysis did yield a marginal interaction between condition and word type, $F(1, 42) = 3.19$, $p = .08$. To further investigate the effects of stereotype exposure on (log-transformed) reaction times to neutral and justice-related words separately, we inspected univariate results from a multivariate analysis that included the same control variables as in the repeated measures analysis above.

As illustrated in Figure 4, people who were exposed to noncomplementary representations showed faster reaction times to justice-related words ($M = 626.83$ ms) than did people who were exposed to (nonthreatening) complementary representations ($M = 712.61$ ms). Univariate results confirmed that the two conditions differed, $F(1, 42) = 3.68$, $p = .06$. The manipulation had no corresponding effect on neutral control words, $F(1, 42) = 0.03$, $p = .86$.

These findings provide support for the notion that exposure to noncomplementary representations of the rich as happier than the poor implicitly activates the justice motive, presumably because it poses a threat to the belief that outcomes are fairly and evenly distributed in society. In the fourth and final study, we attempted to replicate these results by manipulating exposure to complementary versus noncomplementary stereotypes of the rich and poor in the domain of morality.

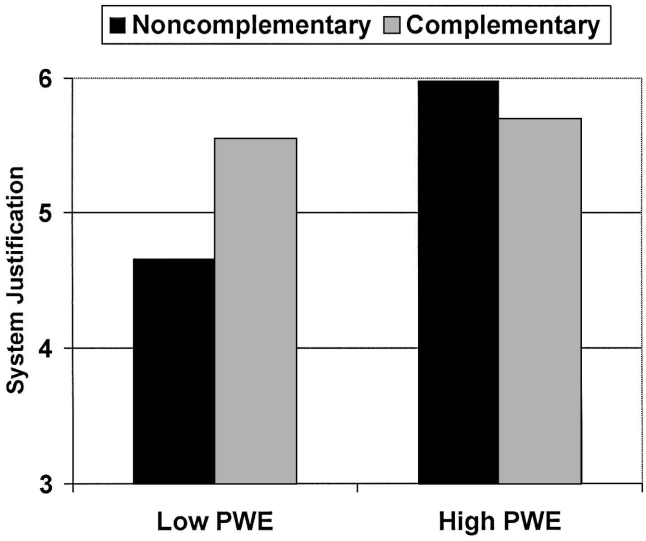

Figure 3. Effects of Protestant work ethic (PWE) and exposure to complementary versus noncomplementary stereotype exemplars on system justification (Study 3).

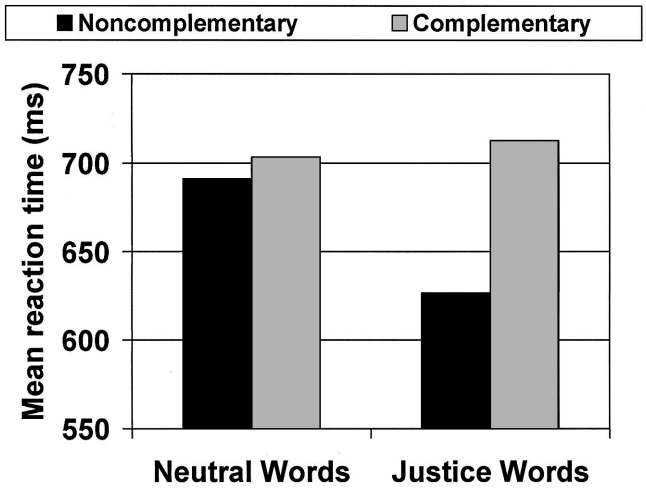

Figure 4. Effects of exposure to complementary versus noncomplementary stereotype exemplars on accessibility of justice-related and neutral words (Study 3).

Study 4

Method

Research participants. Fifty-one people (32 women and 19 men) ranging in age from 18 to 47 were recruited for this experiment through flyers posted in and around Stanford University and Palo Alto, California. Participants (with one exception) provided information concerning family income by checking one of nine different categories. With regard to frequency distributions, 11 (or 22%) of the participants reported a family income of under $50,000, 28 (56%) reported a family income between $50,000 and $150,000, and 11 (22%) reported a family income of over $150,000.

Procedure. The procedure was almost identical to that followed in Study 3. The only change to the manipulation of complementarity was that the relationship between the two protagonists in the story was varied along wealth and morality dimensions (rather than wealth and happiness dimensions). The first part of the vignette was exactly the same as in Study 3, but the concluding portions were modified. In the complementary condition, participants read that

> Despite Mitchell's smaller house and lower salary, he tends to be a much more honest person than Joseph. Mitchell "plays it fair" in most aspects of his life and is known amongst his friends as that guy who's always been "broke but honest." Joseph, on the other hand, lacks the strong sense of morals that Mitchell has and is often thought of as that "rich but dishonest guy."

Participants assigned to the noncomplementary condition instead received the following ending:

> Not only does Mitchell have a smaller house and lower salary than Joseph, he also tends to be a much less honest person than Joseph. Joseph "plays it fair" in most aspects of his life and is known amongst his friends as that guy who's "rich and honest." Mitchell, on the other hand, lacks the strong sense of morals that Joseph has and is often thought of as that "broke, dishonest guy."

In the second phase of the experiment, the same lexical decision task used in Study 3 was administered.[9] Participants completed the system justification ($\alpha = .75$) and PWE ($\alpha = .80$) scales from Study 3 as well.

Results and Discussion

Effects on explicit system justification. We conducted a 2 (complementary vs. noncomplementary representation) × 2 (high vs. low PWE) ANOVA on explicit system justification scores. Control variables for gender, age, and income (nine levels) were also included in the model, but none of them exerted a reliable effect on system justification in this study.

The analysis yielded a main effect of experimental condition, indicating that exposure to complementary (poor + honest/rich + dishonest) exemplars again resulted in higher system justification scores than did exposure to noncomplementary (poor + dishonest/rich + honest) exemplars, $F(1, 43) = 4.00$, $p = .05$. We also obtained a marginal interaction between PWE and stereotype exposure, $F(1, 43) = 3.14$, $p = .08$. As illustrated in Figure 5, exposure to "poor but honest" stereotype exemplars increased system justification more among high PWE scorers than among low PWE scorers. For people who were low in PWE, there was no effect of experimental condition, $t(25) = 0.17$, $p = .87$. For people who scored high in PWE, however, system justification was significantly higher in the complementary condition ($M = 5.82$) than in the noncomplementary condition ($M = 4.59$), $t(22) = 2.94$, $p < .01$.

This finding, in conjunction with the results of Study 3, suggests that PWE is differentially related to dimensions of morality and happiness, as noted by previous researchers (Jones, 1997; Mirels & Garrett, 1971). Low PWE scorers seem to be more affected by "poor but happy" stereotype exemplars, whereas high PWE scorers are more affected by "poor but honest" exemplars. This divergence between the two types of traits is especially interesting in light of the finding from Study 2 that the "poor but honest" exemplar triggered "poor but happy" associations (although the "poor but happy" exemplar in Study 1 did not trigger "poor but honest" associations). The fact that PWE exerted different moderating effects in relation to the two types of representations suggests, among other things, that "poor but honest" effects are not merely attributable to "poor but happy" inferences.

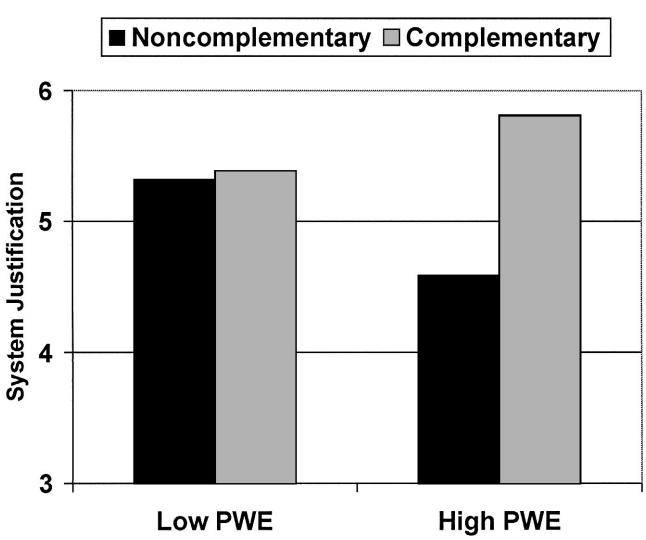

Figure 5. Effects of Protestant work ethic (PWE) and exposure to complementary versus noncomplementary stereotype exemplars on system justification (Study 4).

Effects on implicit activation of the justice motive. As in the previous study, we conducted a 2 (complementary vs. noncomplementary representation) × 2 (high vs. low PWE) × 2 (log-transformed reaction time to justice-related vs. neutral target word stimuli) mixed model ANOVA, with repeated measures on the last factor. Control variables for gender, age, and income (nine levels) were also included in the model. Of these, only age exerted a reliable main effect, indicating that older participants were slower than younger participants to respond to both justice-related and neutral words, $F(1, 43) = 4.49$, $p = .04$. Neither gender nor income exerted reliable effects.

As in the previous study, PWE had no effects whatsoever on implicit measures. A main effect of exposure condition was observed, indicating that participants assigned to the complementary condition were slower than participants assigned to the noncomplementary condition to respond to both types of words, $F(1, 43) = 4.87$, $p < .04$. The analysis yielded no main effect of word type, but the hypothesized interaction did attain statistical significance, $F(1, 43) = 7.25$, $p < .01$.

As illustrated in Figure 6, exposure to noncomplementary representations led to faster reaction times to justice-related words ($M = 610.74$ ms) than did exposure to complementary representations ($M = 691.03$ ms). A univariate test conducted on log-transformed means confirmed that the difference between conditions was significant, $F(1, 43) = 8.71$, $p < .005$. For the neutral words, however, no difference between conditions was observed, $F(1, 43) = 1.12$, $p = .30$. Contrary to equity, balance, and victim derogation theories, exposure to "rich + honest" stereotype exemplars posed an implicit threat to the justification of the system, and exposure to "poor + honest" stereotype exemplars satisfied justification needs. Thus, Studies 3 and 4 extend and replicate the findings of the first two studies and provide insight into the implicit cognitive processes that may underlie system-justifying effects of complementary stereotypes.

General Discussion

It has often been argued that people are motivated to view their social world as fair, legitimate, and justified (e.g., Jost & Banaji, 1994; Kluegel & Smith, 1986; Lerner, 1980; Major, 1994). When these motivated perceptions are threatened by unjust situations, cognitive processes aimed at either rationalizing or rectifying the injustice are stimulated (Hafer, 2000). In short, the justice (or perhaps *justification*) motive is activated (e.g., Lerner, 1977, 2002; Montada, 2002). Economic inequality is one situation that has the potential to threaten the cherished BJW (Furnham & Gunter, 1984;

[9] This time, no mean response latencies were more than three standard deviations from the mean, so all 51 participants were included in final analyses. Reaction times were again log-transformed to correct for skewness prior to significance testing, although it made little difference to the results.

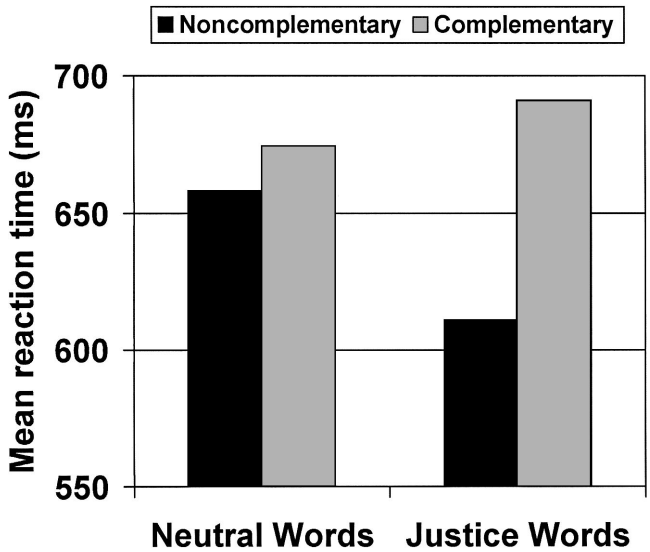

Figure 6. Effects of exposure to complementary versus noncomplementary stereotype exemplars on accessibility of justice-related and neutral words (Study 4).

Lerner, 1980; Montada & Schneider, 1989), unless it can be justified in some manner (e.g., Glick & Fiske, 2001; Jost & Hunyady, 2002).

Lane (1959) theorized that holding complementary, offsetting stereotypic beliefs helped people (especially the poor) to tolerate and justify economic inequality. He specifically suggested that "poor but happy" and "poor but honest" stereotypes were particularly useful in rationalizing inequality. Lerner (1980) also suggested that people are motivated by the BJW to see the underprivileged as "having their own compensating rewards" (p. 20). In four experimental studies, we obtained support for the notion that exposure to complementary stereotype exemplars both increases system justification at the explicit level and satisfies the justice motive at the implicit level, relative to noncomplementary stereotype exemplars.

These findings are of special interest because they demonstrate the existence of a justification process that is new to the social justice literature. Traditionally, the process of rationalization that has received the bulk of empirical support has been victim-blaming (e.g., Lerner, 1980; Lerner & Miller, 1978). Research focusing on psychological responses to the poor has especially emphasized this cognitive-motivational process. For example, it has been shown that people who score highly on the just world scale and those who are prevented from restoring justice through prosocial actions will derogate the poor in order to satisfy the justice motive (e.g., Furnham & Gunter, 1984; Montada & Schneider, 1989). However, these processes do not always seem to be effective (see Reichle & Schmitt, 2002), and this observation has led some researchers to propose a search for additional system-justifying strategies (e.g., Hafer, 2000; Lerner, 1980).

In noting that "measures of victim blame and derogation do not always show the patterns of results expected from just-world reasoning," Hafer (2000, p. 172) recommended that researchers use implicit measures that are "alternative to direct self-report" in order to discover additional rationalizing strategies. This may signal a sea change in just world research (see also Lerner & Goldberg, 1999), which has traditionally used very explicit, deliberative methodologies. A new focus on less explicit processes fits well with research demonstrating that system justification operates at implicit as well as explicit levels of awareness (Jost et al., 2002; Nosek, Banaji, & Greenwald, 2002; Rudman et al., 2002; Uhlmann et al., 2002).

These considerations lead us to speculate that the disparity between the present set of findings and previous research on responses to victimization may be partly understood in light of the dual-process distinction (Lerner & Goldberg, 1999). Much, but by no means all, of the past work on justice beliefs concerning divisions of wealth has involved correlational and self-report measurement tools (e.g., Furnham & Gunter, 1984; Furnham & Procter, 1989; Reichle & Schmitt, 2002). In our studies, by contrast, we examined system justification processes using indirect, relatively subtle methodologies rather than measuring explicit attributions tied to an overtly unjust situation. We therefore adopted the social cognitive assumptions that (a) reaction times can be used to assess cognitive accessibility resulting from threat (Hafer, 2000; MacLeod & Hodder, 1998; Mikulincer et al., 2002), and (b) as long as participants are kept from making any explicit link between the independent variable manipulation and responses to the dependent measure, preconscious processes are likely to operate (Bargh, 1996; Higgins, 1996). Thus, in the first two studies, several steps were taken to ensure that the independent and dependent variables appeared to be as unrelated to one another as possible. In the last two studies, we selected an implicit measure of reaction time to gauge activation of the justice motive. It may be that victim-blaming is a convenient explicit strategy for satisfying the justice motive (especially for people who are high in BJW or PWE), whereas exposure to complementary stereotypes implicitly satisfies the justice motive.

In this respect, different types of system-justifying responses may be "substitutable" for one another. Studies addressing a variety of self-protective mechanisms—beginning with the earliest cognitive dissonance experiments (Festinger, 1957) and subsequent work on processes of self-affirmation (Steele, 1988; Steele & Liu, 1983) and self-evaluation maintenance (Tesser & Cornell, 1991)—have turned up numerous cases of psychological substitutability in response to threat. Dissonance reduction, self-affirmation, and self-evaluation maintenance seem to be interchangeable strategies for coping with situational threats to the self-concept (see Tesser, Martin, & Cornell, 1996). Our results, taken in conjunction with those from studies of victim-blaming, suggest that threats to the justice (or justification) motive may similarly evoke different types of responses (including both complementary stereotyping and victim-blaming) aimed at satisfying the same need, namely to restore the BJW. Which response is chosen presumably depends on a number of factors, including individual differences and situational constraints. Future studies are needed to clarify whether implicit satisfaction of the justice motive (e.g., by exposure to complementary stereotypes) removes the psychological necessity of explicitly satisfying the justice motive through victim derogation or avoidance.

Our results have implications for individual difference variables such as the PWE (e.g., Katz & Hass, 1988). Explicit but not

implicit effects of stereotype exposure were moderated by scores on the PWE. We found that low PWE scorers were more "moved" than high PWE scorers by "poor but happy" (and "rich but unhappy") exemplars in Study 3, but that high PWE scorers were more "moved" than low PWE scorers by "poor but honest" (and "rich but dishonest") exemplars in Study 4. These results are consistent with past observations that the PWE entails complex, somewhat contradictory attitudes concerning relations among poverty, hard work, honesty, and pleasure (Jones, 1997; Mirels & Garrett, 1971). Our findings suggest furthermore that some system-justifying representations (such as the "poor but happy" stereotype) are convincing to individuals who are not dispositionally given to blaming the poor for their own misfortune. Whereas victim derogation may be a response that is relatively unique to people who are high in PWE or BJW (e.g., Biernat et al., 1996; Crandall, 1994; Furnham & Gunter, 1984; Hafer & Olson, 1989; Quinn & Crocker, 1999), we assume that almost everyone engages in system justification to at least some degree.

We found no evidence that income was related to susceptibility to the system-justifying effects of exposure to "poor but happy" or "poor but honest" representations. This tentatively suggests the operation of consensual stereotyping processes, as described by system justification theory (Jost & Banaji, 1994), rather than the rationalization of individual positions, as assumed by Lane (1959) and others. Future research with larger and more economically diverse samples is needed to settle this matter definitively.

Before concluding, we hasten to mention one more potential explanation for the differences between our results and those obtained in more typical victim-blaming studies. Thus far, we have stressed individual difference moderators, but differences in the contents of particular stereotypes might also be relevant. It seems plausible that, in satisfying the justice motive, people would tend to derogate victims on traits that are assumed to be causally related to the nature of the victim's misfortune. However, people would be more likely to enhance victims on traits that are causally unrelated to the particular misfortune to the extent that they are interested in preserving the belief that "no one has it all" and that "every class gets its share," as Lane (1959) put it.

If it is true that, as our research suggests, exposure to complementary stereotypes increases the perceived fairness of the social system, then this may eventually help to explain not only the prevalence of Dickensian cultural portrayals but also the existence of very common forms of stereotypes. For example, the widespread assumptions that men (and members of other high-status groups) are competent but not likeable and that women (and other members of low-status groups) are likeable but not competent (Eagly & Mladinic, 1993; Glick & Fiske, 2001; Jackman, 1994; Ridgeway, 2001) may be similar in both form and function to the "poor but happy" and "rich but miserable" stereotypes investigated here. We have found in other research that exposure to benevolent and complementary gender stereotypes increases system justification among women (Jost & Kay, 2003). We also speculate that popular affinity for other complementary, offsetting stereotypes (or sub-stereotypes), such as beautiful but dumb blondes, aggressive but athletic Blacks, and brilliant but absent-minded professors, might also bear some relation to processes of system justification. Although the present set of studies was designed to examine the effects of exposure to complementary representations rather than the causes or consequences of their formation or endorsement, these issues seem potentially related at the level of social psychological theory. It seems increasingly plausible that complementary forms of stereotyping are appealing in part because they satisfy the desire to perceive existing forms of social and economic arrangements as fair, legitimate, and justified.

References

Baldwin, M. W., Fehr, B., Keedian, E., & Seidel, M. (1993). An exploration of the relational schemata underlying attachment styles: Self-report and lexical decision approaches. *Personality and Social Psychology Bulletin, 19,* 746–754.

Bargh, J. A. (1996). Automaticity in social psychology. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 169–183). New York: Guilford Press.

Bargh, J. A., & Pietromonaco, P. (1982). Automatic information processing and social perception: The influence of trait information presented outside of conscious awareness on impression formation. *Journal of Personality and Social Psychology, 43,* 437–449.

Biernat, M., Vescio, T. K., & Manis, M. (1998). Judging and behaving toward members of stereotyped groups: A shifting standards perspective. In C. Sedikides, J. Schopler, & C. A. Insko (Eds.), *Intergroup cognition and intergroup behavior* (pp. 151–175). Hillsdale, NJ: Erlbaum.

Biernat, M., Vescio, T. K., & Theno, S. A. (1996). Violating American values: A "value congruence" approach to understanding outgroup attitudes. *Journal of Experimental Social Psychology, 32,* 387–410.

Coltheart, M. (1981). The MRC psycholinguistic database. *Quarterly Journal of Experimental Psychology: Human Experimental Psychology, 33*(A), 497–505.

Cooper, W. H. (1981). Ubiquitous halo. *Psychological Bulletin, 90,* 218–244.

Crandall, C. S. (1994). Prejudice against fat people: Ideology and self-interest. *Journal of Personality and Social Psychology, 66,* 882–894.

Crandall, C. S., & Beasley, R. K. (2001). A perceptual theory of legitimacy: Politics, prejudice, social institutions, and moral value. In J. T. Jost & B. Major (Eds.), *The psychology of legitimacy: Emerging perspectives on ideology, justice, and intergroup relations* (pp. 77–102). New York: Cambridge University Press.

Dickens, C. (1971).*The Christmas books, Vol. 1 (A Christmas carol and the chimes*). London: Penguin Books. (Original work published 1843)

Diener, E., & Diener, M. (1995). Cross-cultural evidence correlates of life satisfaction and self-esteem. *Journal of Personality and Social Psychology, 68,* 653–663.

Dion, K. L., & Dion, K. K. (1987). Belief in a just world and physical attractiveness stereotyping. *Journal of Personality and Social Psychology, 52,* 775–781.

Eagly, A., & Mladinic, A. (1993). Are people prejudiced against women? Some answers from research on attitudes, gender stereotypes, and judgments of competence. In W. Stroebe & M. Hewstone (Eds.), *European review of social psychology* (Vol. 5, pp. 1–35). New York: Wiley.

Eagly, A., & Steffen, V. (1984). Gender stereotypes stem from the distribution of women and men into social roles. *Journal of Personality and Social Psychology, 46,* 735–754.

Festinger, L. (1957). *A theory of cognitive dissonance.* Stanford, CA: Stanford University Press.

Fischer, I. S., & Bloom, P. A. (1979). Automatic and attentional processes in the effects of sentence contexts on word recognition. *Journal of Verbal Learning and Verbal Behavior, 18,* 1–20.

Fiske, S. T., Cuddy, A., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology, 82,* 878–902.

Furnham, A., & Gunter, B. (1984). Just world beliefs and attitudes towards the poor. *British Journal of Social Psychology, 23,* 265–269.

Furnham, A., & Procter, E. (1989). Belief in a just world: Review and critique of the individual difference literature. *British Journal of Social Psychology, 28,* 365–384.

Glick, P., & Fiske, S. T. (2001). An ambivalent alliance: Hostile and benevolent sexism as complementary justifications for gender inequality. *American Psychologist, 56,* 109–118.

Hafer, C. L. (2000). Do innocent victims threaten the belief in a just world? Evidence from a modified Stroop task. *Journal of Personality and Social Psychology, 79,* 165–173.

Hafer, C. L., & Olson, J. M. (1989). Beliefs in a just world and reactions to personal deprivation. *Journal of Personality, 57,* 799–823.

Heider, F. (1958). *The psychology of interpersonal relations.* Oxford, England: Wiley.

Higgins, E. T. (1996). Knowledge activation: Accessibility, applicability, and salience. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 133–168). New York: Guilford Press.

Hoffman, C., & Hurst, N. (1990). Gender stereotypes: Perception or rationalization? *Journal of Personality and Social Psychology, 58,* 197–208.

Hunyady, Gy. (1998). *Stereotypes during the decline and fall of communism.* New York: Routledge.

Jackman, M. R. (1994). *The velvet glove: Paternalism and conflict in gender, class, and race relations.* Berkeley: University of California Press.

Jones, H. B. (1997). The Protestant ethic: Weber's model and the empirical literature. *Human Relations, 50,* 757–778.

Jost, J. T., & Banaji, M. R. (1994). The role of stereotyping in system justification and the production of false consciousness. *British Journal of Social Psychology, 22,* 1–27.

Jost, J. T., Banaji, M. R., & Nosek, B. A. (in press). A decade of system justification theory: Accumulated evidence of conscious and unconscious bolstering of the status quo. *Political Psychology.*

Jost, J. T., & Burgess, D. (2000). Attitudinal ambivalence and the conflict between group and system justification motives in low status groups. *Personality and Social Psychology Bulletin, 26,* 293–305.

Jost, J. T., Burgess, D., & Mosso, C. (2001). Conflicts of legitimation among self, group, and system: The integrative potential of system justification theory. In J. T. Jost & B. Major (Eds.), *The psychology of legitimacy: Emerging perspectives on ideology, justice, and intergroup relations* (pp. 363–390). New York: Cambridge University Press.

Jost, J. T., & Hunyady, O. (2002). The psychology of system justification and the palliative function of ideology. *European Review of Social Psychology, 13,* 111–153.

Jost, J. T., & Kay, A. C. (2003). *Exposure to benevolent sexism and complementary gender stereotypes: Consequences for specific and diffuse forms of system justification.* Manuscript submitted for publication.

Jost, J. T., & Major, B. (Eds.). (2001). *The psychology of legitimacy: Emerging perspectives on ideology, justice, and intergroup relations.* New York: Cambridge University Press.

Jost, J. T., Pelham, B. W., & Carvallo, M. R. (2002). Non-conscious forms of system justification: Cognitive, affective, and behavioral preferences for higher status groups. *Journal of Experimental Social Psychology, 38,* 586–602.

Jost, J. T., Pelham, B. W., Sheldon, O., & Sullivan, B. N. (2003). Social inequality and the reduction of ideological dissonance on behalf of the system: Evidence of enhanced system justification among the disadvantaged. *European Journal of Social Psychology, 33,* 13–36.

Jost, J. T., & Thompson, E. P. (2000). Group-based dominance and opposition to equality as independent predictors of self-esteem, ethnocentrism, and social policy attitudes among African Americans and European Americans. *Journal of Experimental Social Psychology, 36,* 209–232.

Katz, I., & Hass, R. G. (1988). Racial ambivalence and American value conflict: Correlational and priming studies of dual cognitive structures. *Journal of Personality and Social Psychology, 55,* 893–905.

Kay, A. C., Jimenez, J. T., & Jost, J. T. (2002). Sour grapes, sweet lemons and the anticipatory rationalization of the status quo. *Personality and Social Psychology Bulletin, 28,* 1300–1312.

Kluegel, J. R., & Smith, E. R. (1986). *Beliefs about inequality: Americans' views of what is and what ought to be.* New York: Aldine de Gruyter.

Lane, R. E. (1959). The fear of equality. *American Political Science Review, 53,* 35–51. [Reproduced in Jost, J. T., & Sidanius, J. (Eds.). (2003). *Political psychology: Key readings.* New York: Psychology Press/Taylor & Francis.]

Lerner, M. J. (1977). The justice motive: Some hypotheses as to its origins and forms. *Journal of Personality, 45,* 1–52.

Lerner, M. J. (1980). *The belief in a just world: A fundamental delusion.* New York: Plenum Press.

Lerner, M. J. (2002). Pursuing the justice motive. In M. Ross & D. T. Miller (Eds.), *The justice motive in everyday life* (pp. 10–37). Cambridge, England: Cambridge University Press.

Lerner, M. J., & Goldberg, J. H. (1999). When do decent people blame victims? The differing effects of the explicit-rational and implicit-experiential cognitive systems. In S. Chaiken & Y. Trope (Eds.), *Dual process theories in social psychology* (pp. 627–640). New York: Guilford Press.

Lerner, M. J., & Miller, D. T. (1978). Just world research and the attribution process: Looking back and ahead. *Psychological Bulletin, 85,* 1030–1051.

Lerner, M. J., & Simmons, C. H. (1966). The observer's reaction to the 'innocent victim': Compassion or rejection? *Journal of Personality and Social Psychology, 4,* 203–210.

Lipkus, I. M. (1991). The construction and preliminary validation of a global belief in a just world scale and the exploratory analysis of the multidimensional belief in a just world scale. *Personality and Individual Differences, 12,* 1171–1178.

Lipkus, I. M., Dalbert, C., & Siegler, I. C. (1996). The importance of distinguishing the belief in a just world for self versus for others: Implications for psychological well-being. *Personality and Social Psychology Bulletin, 22,* 666–677.

Mackenzie, H. (1967). *The man of feeling.* London: Oxford University Press. (Original work published 1771)

MacLeod, C. M., & Hodder, S. L. (1998). Presenting two incongruent color words on a single trial does not alter Stroop interference. *Memory and Cognition, 26,* 212–219.

Major, B. (1994). From social inequality to personal entitlement: The role of social comparisons, legitimacy appraisals, and group memberships. *Advances in Experimental Social Psychology, 26,* 293–355.

Mathews, A. M., & MacLeod, C. (1985). Selective processing of threat cues in anxiety states. *Behaviour Research and Therapy, 23,* 563–569.

Meyer, D., & Schvaneveldt, R. W. (1971). Facilitation in recognizing pairs of words: Evidence of dependence between retrieval operations. *Journal of Experimental Psychology, 90,* 227–234.

Mikulincer, M., Birnbaum, G., Woddis, D., & Nachmias, O. (2000). Stress and accessibility of proximity-related thoughts: Exploring the normative and intraindividual components of attachment theory. *Journal of Personality and Social Psychology, 78,* 509–523.

Mikulincer, M., Gillath, O, & Shaver, P. (2002). Activation of the attachment system in adulthood: Threat-related primes increase the accessibility of mental representations of attachment figures. *Journal of Personality and Social Psychology, 83,* 881–895.

Mirels, H. L., & Garrett, J. B. (1971). The Protestant ethic as a personality variable. *Journal of Consulting and Clinical Psychology, 36,* 40–44.

Montada, L. (2002). Doing justice to the justice motive. In M. Ross & D. T. Miller (Eds.), *The justice motive in everyday life* (pp. 41–62). Cambridge, England: Cambridge University Press.

Montada, L., & Schneider, A. (1989). Justice and emotional reactions to the disadvantaged. *Social Justice Research, 3,* 313–344.

Nosek, B. A., Banaji, M. R., & Greenwald, A. G. (2002). Harvesting implicit group attitudes and beliefs from a demonstration website. *Group Dynamics, 6,* 101–115.

Quinn, D. M., & Crocker, J. (1999). When ideology hurts: Effects of belief in the Protestant ethic and feeling overweight on the psychological well-being of women. *Journal of Personality and Social Psychology, 77,* 402–414.

Reichle, B., & Schmitt, M. (2002). Helping and rationalizing as alternative strategies for restoring the belief in a just world: Evidence from longitudinal change analyses. In M. Ross & D. T. Miller (Eds.), *The justice motive in everyday life* (pp. 127–148). Cambridge, England: Cambridge University Press.

Ridgeway, C. (2001). The emergence of status beliefs: From structural inequality to legitimizing ideology. In J. T. Jost & B. Major (Eds.), *The psychology of legitimacy: Emerging perspectives on ideology, justice, and intergroup relations* (pp. 257–277). New York: Cambridge University Press.

Rubin, Z., & Peplau, L. A. (1975). Who believes in a just world? *Journal of Social Issues, 31,* 65–89.

Rudman, L. A., Feinberg, J., & Fairchild, K. (2002). Minority members' implicit attitudes: Automatic ingroup bias as a function of group status. *Social Cognition, 20,* 294–320.

Ryan, R. M., & Deci, E. L. (2000). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology, 52,* 141–166.

Snyder, M., & Miene, P. K. (1994). Stereotyping of the elderly: A functional approach. *British Journal of Social Psychology, 33,* 63–82.

Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the integrity of self. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 21, pp. 261–302). New York: Academic Press.

Steele, C. M., & Liu, T. J. (1983). Dissonance processes as self-affirmation. *Journal of Personality and Social Psychology, 45,* 5–19.

Sterne, L. (1768). *A sentimental journey through France and Italy.* Oxford, England: Oxford University Press.

Superlab (Version 1.05) [Computer software]. (1997). Phoenix, AZ: Cedrus Corp.

Tesser, A., & Cornell, D. P. (1991). On the confluence of self-processes. *Journal of Experimental Social Psychology, 27,* 501–526.

Tesser, A., Martin L. L., & Cornell, D. P. (1996). On the substitutability of self-protective mechanisms. In P. Gollwitzer & J. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behavior* (pp. 48–68). New York: Guilford Press.

Toynbee, A. J. (1947). *A study of history.* Oxford, England: Oxford University Press.

Uhlmann, E., Dasgupta, N., Elgueta, A., Greenwald, A. G., & Swanson, J. E. (2002). Subgroup prejudice based on skin color among Hispanics in the United States and Latin America. *Social Cognition, 20,* 198–225.

Vonk, R. (1999). Effects of other-profitability and self-profitability on evaluative judgements of behaviours. *European Journal of Social Psychology, 29,* 833–842.

Walster, E., Berscheid, E., & Walster, G. W. (1978). *Equity: Theory and research.* Boston: Allyn & Bacon.

Weber, M. (1958). *The Protestant ethic and the spirit of capitalism* (T. Parsons, Trans.). New York: Scribner. (Original work published 1905)

Received July 11, 2002
Revision received May 13, 2003
Accepted May 15, 2003 ■

ORDER FORM

Start my 2004 subscription to ***Journal of Personality and Social Psychology!*** ISSN: 0022-3514

___ $190.00, APA MEMBER/AFFILIATE _____
___ $382.00, INDIVIDUAL NONMEMBER _____
___ $1,069.00, INSTITUTION _____
In DC add 5.75% / In MD add 5% sales tax _____
TOTAL AMOUNT ENCLOSED $ _____

Subscription orders must be prepaid. (Subscriptions are on a calendar year basis only.) Allow 4-6 weeks for delivery of the first issue. Call for international subscription rates.

AMERICAN PSYCHOLOGICAL ASSOCIATION

SEND THIS ORDER FORM TO:
American Psychological Association
Subscriptions
750 First Street, NE
Washington, DC 20002-4242

Or call **(800) 374-2721**, fax **(202) 336-5568**.
TDD/TTY **(202) 336-6123**.
For subscription information, e-mail:
subscriptions@apa.org

◯ **Send me a FREE Sample Issue**
◯ **Check enclosed** (make payable to **APA**)
Charge my: ◯ VISA ◯ MasterCard ◯ American Express

Cardholder Name _____
Card No. _____ Exp. Date _____
_____
Signature (Required for Charge)

BILLING ADDRESS: _____
_____
City _____ State _____ Zip _____
Daytime Phone _____
E-mail _____

SHIP TO:
Name _____
Address _____
_____
City _____ State _____ Zip _____
APA Member # _____ *PSPA14*