

Perceived Discrimination as Worldview Threat or Worldview Confirmation: Implications for Self-Esteem

Brenda Major
University of California, Santa Barbara

Cheryl R. Kaiser
University of Washington

Laurie T. O'Brien
Tulane University

Shannon K. McCoy
University of Maine

In 3 studies, the authors tested the hypothesis that discrimination targets' worldview moderates the impact of perceived discrimination on self-esteem among devalued groups. In Study 1, perceiving discrimination against the ingroup was negatively associated with self-esteem among Latino Americans who endorsed a meritocracy worldview (e.g., believed that individuals of any group can get ahead in America and that success stems from hard work) but was positively associated with self-esteem among those who rejected this worldview. Study 2 showed that exposure to discrimination against their ingroup (vs. a non-self-relevant group) led to lower self-esteem, greater feelings of personal vulnerability, and ingroup blame among Latino Americans who endorsed a meritocracy worldview but to higher self-esteem and decreased ingroup blame among Latino Americans who rejected it. Study 3 showed that compared with women informed that prejudice against their ingroup is pervasive, women informed that prejudice against their ingroup is rare had higher self-esteem if they endorsed a meritocracy worldview but lower self-esteem if they rejected this worldview. Findings support the idea that perceiving discrimination against one's ingroup threatens the worldview of individuals who believe that status in society is earned but confirms the worldview of individuals who do not.

Keywords: prejudice, discrimination, stigma, ideology, status justification

In every society, some groups are socially devalued, economically disadvantaged, and targets of prejudice and discrimination (Sidanius & Pratto, 1999). Social scientists have long sought to understand how this treatment affects feelings of self-worth and ingroup attitudes among members of these groups (e.g., Allport, 1979; Bobo & Hutchings, 1996; Crocker & Major, 1989; Crocker, Major, & Steele, 1998; Lane, 1962; Major, 1994; Steele, 1997; Tajfel & Turner, 1986). Contradictory answers have emerged. Some scholars argue that individuals who are targets of prejudice cannot help but internalize their social devaluation, resulting in poorer self-esteem and more negative attitudes toward their social group (e.g., Cartwright, 1950; Erikson, 1956; Jost & Hunyady, 2002; Kardiner & Ovesey, 1951). Others, in contrast, assert that prejudice does not necessarily lead to lowered self-esteem among

its targets and, further, that the perception of prejudice may even protect self-esteem to the extent that it enables targets to attribute disadvantage to the prejudice of others instead of to internal stable characteristics of themselves or their social group (e.g., Crocker & Major, 1989; Crocker, Major, & Steele, 1998; Dion, 1975; Dion & Earn, 1975; Dubois, 1903; Major, Kaiser, & McCoy, 2003; Rosenberg & Simmons, 1972).

We propose that the impact of perceived discrimination on self-esteem depends upon the target's core assumptions and beliefs about the way the world works, that is, his or her *worldview* (Greenberg, Solomon, & Pyszczynski, 1997; Janoff-Bulman, 1989; Koltko-Rivera, 2004; Solomon, Greenberg, & Pyszczynski, 1991). Worldviews play an important role in how individuals appraise and adjust to stressful life events (e.g., Janoff-Bulman, 1989; Lazarus & Folkman, 1984; Taylor, 1983). We propose that worldviews also shape how individuals appraise, cope with, and ultimately respond to prejudice and discrimination directed against them or against their ingroup (Major, 1994; Major, McCoy, Kaiser, & Quinton, 2003; Major & O'Brien, 2005; Major, Quinton, & McCoy, 2002; Major & Schmader, 2001). We predict that to the extent perceived discrimination threatens individuals' worldview, it will also threaten their self-esteem. In contrast, we predict that to the extent perceived discrimination confirms individuals' worldview it may buffer or bolster their self-esteem. We refer to this as a *worldview verification model* of responses to discrimination.

Brenda Major, Department of Psychology, University of California, Santa Barbara; Cheryl R. Kaiser, University of Washington; Laurie T. O'Brien, Tulane University; Shannon K. McCoy, University of Maine.

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Correspondence concerning this article should be addressed to Brenda Major, Department of Psychology, University of California, Santa Barbara, CA 93106-9660. E-mail: major@psych.ucsb.edu

CULTURAL WORLDVIEWS AND STATUS IDEOLOGIES

A core component of people's worldview is their understanding of and explanation for the unequal distribution of social and material goods in society. Psychologists, sociologists, and political scientists have used a variety of terms to refer to this aspect of people's cultural worldview, such as *stratification beliefs* (Bobo & Hutchings, 1996), *social mobility belief structures* (Hogg & Abrams, 1988), *hierarchy enhancing* (or *attenuating*) *myths* (Sidanius & Pratto, 1993), *system-justifying beliefs* (Jost & Banaji, 1994), *status-legitimizing ideologies* (Major & Schmader, 2001), and more simply, *ideologies* (Crandall, 1994; Jost, Burgess, & Mosso, 2001; Major, 1994; Quinn & Crocker, 1999). Although there are differences, all of these terms refer to an integrated and shared system of social attitudes, beliefs, and values that explains status differences that exist in society. Like other aspects of people's worldview, status ideologies provide a meaningful description of and explanation for reality and describe standards necessary to be a person of social and material value (Greenberg et al., 1986). By so doing, status ideologies serve to reduce uncertainty and to allow individuals to function more effectively (Bowlby, 1969; Epstein, 1973; Fiske, 2004; Hogg, 2001; Lerner, 1980; Van den Bos & Lind, 2002). Consequently, people are highly motivated to confirm and to defend this aspect of their worldview from threat.

Status ideologies are frequently status legitimizing (Major et al., 2002) or system justifying (Jost & Banaji, 1994). That is, they often serve to preserve a view of existing status arrangements in society as fair and just (Crosby, 1984; Jost & Hunyady, 2002; Major, 1994; Sidanius & Pratto, 1993, 1999). Consider, for example, the belief that hard work leads to success (the Protestant work ethic [PWE]; Katz & Hass, 1988), the belief that any individual can get ahead regardless of group membership (the belief in individual mobility [IMB]; Major, Gramzow, et al., 2002), and the belief that individuals get what they deserve and deserve what they get (the belief in a just world [BJW]; Lerner, 1980; Rubin & Peplau, 1975). Collectively and individually, all these beliefs justify status inequalities by holding people responsible for their station in life and by locating the cause of their outcomes within their own efforts, merit, or deservingness. Other attitudes, values, and beliefs, such as the belief in personal control, political conservatism, authoritarianism, and group stereotypes also are examples of system justifying status ideologies (Crandall, 1994; Jost & Banaji, 1994; Sidanius & Pratto, 1999).

Status ideologies are often broadly known and widely shared within a cultural context. In Westernized, capitalist countries, for example, the dominant status ideology is meritocratic—it holds that any individual, regardless of group membership, can be successful if he or she works hard enough or is talented enough (Betancourt & Weiner, 1982; Bobo & Hutchings, 1996; Crandall & Martinez, 1996; Furnham & Proctor, 1989; Jost & Hunyady, 2002; Katz & Hass, 1988; Kleugel & Smith, 1986; Plaut, Markus, & Lachman, 2002). Pratto, Sidanius, Stallworth, and Malle (1994) refer to this as a meritocratic ideology because it explains (and justifies) status differences in society in terms of individual differences in merit or deserving. This meritocracy ideology is ubiquitous in U.S. society. It is inculcated in American children through shared stories such as those of Horatio Alger and *The*

Little Engine That Could, to the extent that it is sometimes called “The American Dream” (Plaut et al., 2002).

In a series of studies, Major and her colleagues demonstrated that endorsing or activating elements of a meritocracy ideology leads members of socially disadvantaged groups (e.g., women, Latinos, African Americans) to engage in a variety of system-justifying responses. For example, members of disadvantaged groups who believe in individual mobility or believe that success is based on individual effort are less likely to see their group as a victim of discrimination (Major, Gramzow, et al., 2002), less likely to attribute poor personal outcomes to discrimination (Major, Gramzow, et al., 2002), less likely to devalue domains in which their ingroup is disadvantaged relative to higher status groups (Schmader et al., 2002), and report a lesser sense of entitlement to pay (O'Brien & Major, in press) compared with members of disadvantaged groups who reject these status-legitimizing beliefs. Furthermore, McCoy and Major (2007) showed that compared with women primed with neutral content, women primed with sentences tying success to merit were subsequently less likely to perceive themselves as victims of discrimination and more likely to stereotype women in ways that justified women's lower status. Thus, endorsing or activating a meritocracy ideology buffers members of disadvantaged groups from seeing themselves as victims of discrimination and leads them to legitimize unequal status relations, thereby serving to maintain the stability of the status quo (Hafer & Olson, 1989; Jost & Banaji, 1994; Sidanius & Pratto, 1993, 1999).

Despite the prominence of a meritocracy ideology in Western capitalist societies, not all individuals subscribe to this worldview. In the United States, African American and Latino American college students, for example, are significantly less likely than European American or Asian American college students to believe that hard work pays off, that anyone can get ahead regardless of group membership, or that status differences that exist between groups are legitimate (Levin, Sidanius, Rabinowitz, & Federico, 1998; Major, Gramzow, et al., 2002; O'Brien & Major, 2005). People who have repeatedly experienced a lack of contingency between their own efforts and their outcomes, or who have repeatedly witnessed this lack of contingency in the lives of others like themselves, may not only reject meritocracy as a meaningful explanation of their reality but may also reject the legitimacy of the current status hierarchy overall.

Individuals who have repeatedly been victims of discrimination may explain social status in terms of bias, discrimination, and/or favoritism. These alternative explanations may protect their self-esteem by providing explanations other than a lack of individual effort or merit for their own (or their group's) social disadvantage (Crocker & Major, 1989). Further, to the extent that these beliefs are shared with others, they may protect self-esteem by becoming an alternative cultural worldview that provides meaning and value (Crocker, Luhtanen, Broadnax, & Blaine, 1999; Sellers, Smith, Shelton, Rowley, & Chavous, 1998). Rather than serving to justify the system (e.g., Jost & Banaji, 1994), this worldview challenges its legitimacy (Hogg, 2001; Sidanius & Pratto, 1999; Tajfel & Turner, 1986). In addition, it enables members of socially devalued groups to anticipate and prepare for injustice, thereby potentially lessening its sting. For example, Sellers and Shelton (2003) observed that

African Americans with a nationalist or oppressed minority racial ideology may expect to experience racial discrimination in their daily lives and may be more prepared to deal with it. As a result these individuals would be buffered from the deleterious consequences of racial discrimination. That is, because the concept of racial discrimination is not foreign to the way in which they engage the world, they are better able to deal with it. . . . African Americans, however, who believe that other groups have relatively positive opinions of African Americans (high public regard) are less likely to think that others' will treat them negatively because of their race. The experience of racial discrimination is inconsistent with their worldview. As a result, these individuals have to engage in the psychologically taxing task of reconciling the inconsistency between their worldview and their experience. (pp. 1081–1082)

DISCRIMINATION AS WORLDVIEW THREAT OR WORLDVIEW CONFIRMATION

Worldviews help to satisfy humans' fundamental need to understand their social world and to feel like people of worth (Fiske, 2004; Hogg, 2001; Solomon et al., 1991). Hence, confirmation of one's worldview should increase feelings of certainty, security, and positive affect, whereas threats to one's worldview should increase feelings of vulnerability, distress, and negative affect (Greenberg et al. 1997; Janoff-Bulman, 1989; Kaiser, Vick, & Major, 2004; Lerner, 1977). The strength with which a particular worldview is held determines the degree of negative affect that is likely to be experienced when it is threatened. For example, in a prospective study of Americans' reactions to the terrorist attacks of 9/11, the more strongly U.S. college students endorsed the belief in a just world prior to the attacks, the more emotional distress they reported subsequent to the attacks (Kaiser, Vick, & Major, 2004).

According to terror management theory (TMT), maintaining faith in one's worldview is essential for self-esteem (Solomon et al., 1991). TMT assumes that self-esteem derives from meaning (maintaining faith in one's cultural worldview) and value (perceiving that one is meeting the standards of value within that cultural worldview). If either meaning or value is altered, self-esteem will be changed (Greenberg et al., 1997; Solomon et al., 1991). This perspective implies that events that threaten faith in the correctness of one's worldview have the potential to damage self-esteem. In addition, however, it implies that to the extent that one's worldview is a source of value, events that confirm the correctness of one's worldview have the potential to bolster self-esteem.

Drawing on the above literature, we propose a *worldview verification* theory of responses to discrimination among disadvantaged groups. Specifically, we hypothesized that perceiving discrimination directed against the ingroup (or self) threatens the worldview of individuals who embrace a meritocracy ideology. Because perceiving discrimination threatens their sense of meaning and value, it decreases their self-esteem. In contrast, we hypothesized that perceiving discrimination directed against the ingroup (or self) confirms the worldview of individuals who reject a meritocracy ideology and believe that despite hard work and talent, members of some groups face barriers to success in America. Because perceived discrimination corroborates their status ideology, we predicted that perceiving discrimination against the ingroup or (self) buffers or bolsters their self-esteem.

We also test the hypothesis that individuals respond to threats to their worldview with efforts to defend or to restore it (Hart,

Shaver, & Goldenberg, 2005; Lerner, 1980; Solomon et al., 1991; see Greenberg et al, 1997; Hafer & Begue, 2005, for reviews). Research on the belief in a just world has shown that when people's belief in a just world is threatened by an innocent victim, they often react by blaming the victim or derogating his or her character if they cannot rectify the situation (see Hafer & Begue, 2005; Lerner & Miller, 1978; Lerner & Simmons, 1966). If the victim deserves his or her fate, no injustice has occurred and the worldview is preserved. Drawing on this literature, we hypothesized that individuals who endorse a meritocratic, and hence system-justifying, status ideology would respond to evidence that their ingroup is a victim of discrimination (a threat to their worldview) by increasing ingroup blame, that is by increasing the extent to which they held their own group responsible for its low status in society. We did not expect group blame to occur among individuals who reject a meritocratic ideology because perceived discrimination does not threaten their worldview.

To summarize, according to our worldview verification theory, perceiving discrimination against the ingroup threatens the worldview of members of low-status groups who endorse a meritocratic status ideology but confirms the worldview of those who reject this ideology. Consequently, we predicted that the former would respond to perceived discrimination against their ingroup with lower self-esteem and increased blaming of their ingroup for its position. In contrast, we predicted that the latter would potentially experience enhanced self-esteem in response to perceived discrimination against their ingroup because such information confirms their worldview.

Two recent studies by Foster and colleagues (Foster, Sloto, & Ruby, 2006; Foster & Tsarfati, 2005) have provided partial support for our perspective. Foster et al. (in press) found that a belief in meritocracy was positively correlated with self-esteem among women and ethnic minorities who reported few past experiences of personal discrimination but was negatively correlated with self-esteem among those who reported many past experiences with personal discrimination. In a laboratory experiment, Foster and Tsarfati (2005) found that women who were targets of a first-time, acute instance of gender discrimination had higher self-esteem if they rejected meritocracy than if they endorsed meritocracy. In contrast, women who were targets of a merit-based rejection had higher self-esteem if they endorsed meritocracy than if they rejected meritocracy.

Foster and colleagues drew upon group consciousness theories (e.g., Bowles & Klein, 1983) and the shattered assumptions model of coping with traumatic events (Janoff-Bulman, 1989, 1992) to explain these findings. According to these theoretical perspectives, holding positive world assumptions (such as a belief in meritocracy) is positively associated with well-being among members of socially disadvantaged groups, as long as those positive assumptions remain "unshattered" by personally experiencing the trauma of discrimination. Once individuals have been victims of discrimination, however, criticizing the system (rejecting meritocracy) is assumed to be more psychologically beneficial. These theoretical perspectives can explain why women and/or minorities who endorsed meritocracy but perceived themselves to have been a victim of discrimination (or were exposed to gender discrimination for the first time) had lower self-esteem than those who rejected meritocracy. These perspectives have difficulty, however, explaining why women and ethnic minorities who hold a negative worldview (i.e.,

who reject meritocracy) had higher self-esteem if they reported being a victim of discrimination than if they reported not being a victim of discrimination.

Both patterns, in contrast, are consistent with predictions of our worldview verification model. Our model predicts that people will experience emotional distress whenever they encounter information that challenges their core worldviews, relatively independent of the content of the worldview and the experience. Consequently, it predicts that self-esteem will suffer when people experience negative life events that undermine their positive worldviews. In addition, it leads to the counterintuitive prediction that people's self-esteem also will suffer when they experience positive life events, if those events undermine a deeply held worldview that provides meaning and value. A worldview verification model also predicts that people will experience enhanced self-esteem when they encounter information that affirms their core worldviews, even if that information is negative. In addition, a worldview verification model predicts that people proactively work to maintain their worldview and engage in efforts to defend their worldview if it is threatened. Thus, for example, our worldview verification model predicts that people who believe in a meritocracy may respond to victims of discrimination by blaming the victim, even if the victim is their own group. Finally, in contrast to the shattered assumption model, our worldview verification model does not assume that believing in meritocracy can only be psychologically beneficial if an individual has not yet personally experienced the trauma of discrimination.

CURRENT RESEARCH

Three studies tested hypotheses derived from our worldview verification theory of responses to discrimination. Specifically, we examined whether endorsing a meritocracy ideology moderated the self-esteem and ingroup blame of members of devalued groups in response to perceived discrimination directed against their ingroup. Study 1 examined the relationship between perceived discrimination against one's ethnic group and personal self-esteem as a function of endorsing a meritocracy ideology among a sample of Latino American university students. Study 2 examined whether endorsing a meritocracy ideology moderated the effects of exposure to discrimination against the ingroup versus a non-self-relevant group on self-esteem and ingroup blame among Latino American students. Study 3 examined whether endorsing a meritocracy ideology moderated women's self-esteem and ingroup blame in response to reading that discrimination against women in America is pervasive versus rare.

In this research, we measured meritocracy ideology (MI) by assessing the extent to which participants endorsed two beliefs: the belief that success is linked to hard work (PWE) and the belief in individual mobility (IMB). We do not presume that these two beliefs fully capture all components of MI. As noted above, status ideologies are integrated, coherent systems of beliefs, attitudes and values that are shared with others and that explain status differences in society. MI explains and justifies status differences by locating the cause of people's station in life within their own efforts and talents or their merit. Other attitudes, beliefs, and values also contribute to this ideological framework (Pratto et al., 1994). Prior research has assessed elements of MI with a variety of constructs such as a belief in personal control (Quinn & Crocker,

1999), a belief in a just world (Dalbert, 2001), political conservatism (Crandall, 1994), PWE (Quinn & Crocker, 1999), and IMB (Major, Gramzow, et al., 2002). What these constructs share is that they all locate the cause of status differences within individuals and justify existing status differences as deserved. Thus, even though their content differs, they share a common system justifying function. For example, O'Brien and Major (2005) demonstrated that PWE, BJW, IMB, and a belief in status legitimacy (BSL) are only modestly correlated (r s ranged from .32 to .47), but nonetheless show highly similar relationships with self-esteem among members of both high-status (European Americans) and low-status (African Americans and Latinos) groups. From an ideological framework, trying to determine which one of these varied beliefs, attitudes, or values is the "true" or "unique" index of meritocracy is pointless as this removes all predictive power that could be attributed to the overlap among these constructs (i.e., the core ingredients of the merit ideology). What is important is that individually and collectively, these constructs work in common to explain (and justify) status relations in society.

Study 1

Method

Participants

Participants were 191 self-identified Latino American undergraduates enrolled in introductory psychology courses at a large public university in the western United States. The mean age of participants was 18.6 years. Women made up 70% of the sample.

Procedure

Measures of MI, perceptions of discrimination, and self-esteem were included among other questionnaires that were administered to students at the beginning of the academic quarter.

Measures

MI. We assessed PWE and IMB with two 4-four item scales adapted from Levin et al. (1998). The four IMB items were as follows: "America is an open society where all individuals can achieve higher status," "Advancement in American society is possible for all individuals," "Individual members of certain groups are often unable to advance in American Society" (reversed), and "Individual members of certain groups have difficulty achieving higher status" (reversed). The four PWE items were as follows: "Most people who don't get ahead should not blame the system; they really only have themselves to blame"; "If people work hard they almost always get what they want"; "Even if people work hard, they don't always get ahead" (reversed); and "In America, getting ahead doesn't always depend on hard work" (reversed). Scale endpoints were 0 (*strongly disagree*) to 6 (*strongly agree*). PWE and IMB were moderately correlated ($r = .41$).

Perceptions of discrimination. Perceptions of discrimination against one's ethnic group were measured with two items: "My ethnic group is discriminated against" and "Other members of my ethnicity experience discrimination." Scale endpoints were 0 (*strongly disagree*) to 6 (*strongly agree*). These were combined into a reliable scale of perceived discrimination (PD; $\alpha = .87$).

Personal self-esteem. Self-esteem was assessed with the 10-item Rosenberg Global Self-Esteem Scale (Rosenberg, 1979) as well as the 7-item Social Self-Esteem subscale and the 7-item Performance Self-Esteem subscale of Heatherton and Polivy's (1991) State Self-Esteem Scale. Sample items from the Rosenberg (1979) scale include "I feel that I have a number of good qualities" and "I have a positive attitude towards myself." Sample items from the Social Self-Esteem subscale include "I feel self-conscious" and "I feel inferior to others at this moment." Sample items from the Performance Self-Esteem subscale include "I feel confident about my abilities" and "I feel as smart as others." Items from all three scales were measured on 7-point scales with endpoints of 0 (*not at all*) and 6 (*very much*). The Global Self-Esteem Scale ($\alpha = .88$), the Social Self-Esteem subscale ($\alpha = .88$), and the Performance Self-Esteem subscale ($\alpha = .79$) were all internally consistent. Because the three self-esteem scales were highly correlated ($r_s = .54$ to $.64$, $p < .001$) and formed a highly reliable scale ($\alpha = .93$), we aggregated them into a composite measure of personal self-esteem for all subsequent analyses.

Results

Preliminary Analyses

Exploratory factor analysis indicated that participants perceived the items associated with the IMB and PWE scales primarily as representing a single factor that reflects a meritocracy worldview, rather than as two separate dimensions reflecting the two components.¹ Because our focus here is on the implications of endorsing a MI, rather than on the implications of endorsing the specific beliefs that comprise this ideology, we combined the IMB and PWE scales into a composite measure of MI for subsequent analyses ($\alpha = .73$).

Relationships Among Constructs

Zero-order correlations among measures revealed no overall relationship between perceptions of discrimination against one's ethnic group and self-esteem ($r = -.04$; $N = 191$; see also Foster et al., 2006; Kaiser, Major, & McCoy, 2004; Major et al., 2003; McCoy & Major, 2003, for similar findings). Furthermore, there was no overall relationship between endorsement of MI and self-esteem ($r = .03$; see O'Brien & Major, 2005, for similar findings). Consistent with Major, Gramzow, et al. (2002), the more members of ethnic minority groups endorsed MI, the less likely they were to perceive their ethnic group as targeted by discrimination ($r = -.27$, $p < .001$).

Hypothesis Testing

We used regression analyses to test the hypothesis that perceived discrimination would be negatively related to self-esteem among participant who endorsed MI and positively related to self-esteem among participants who rejected MI. The centered MI and PD variables were entered on Step 1 of a hierarchical regression analysis predicting self-esteem, and the $MI \times PD$ interaction term was entered on Step 2. Step 1 was not significant ($R^2 = .00$, $p = .82$). Neither MI ($\beta = .02$, $p = .81$) nor PD ($\beta = -.04$, $p = .62$) significantly predicted self-esteem. However, entering the

interaction term on Step 2 significantly increased R^2 ($\Delta R^2 = .05$, $\beta = -.23$, $p < .01$). This interaction is shown in Figure 1.

To test our primary hypotheses, we probed the interaction by conducting simple slopes analyses for participants who scored one standard deviation above and below the mean on MI ($M = 2.61$, $SD = 0.93$), following guidelines suggested by Aiken and West (1991). As predicted, discrimination perceptions were negatively related to self-esteem among ethnic minority participants who strongly endorsed MI ($\beta = -.20$, $p < .05$). In contrast, discrimination perceptions were positively related to self-esteem among ethnic minority participants who strongly rejected MI ($\beta = .17$, $p < .09$), although this latter relationship was only marginally significant.

We also probed the interaction by conducting simple slopes analyses for participants who scored one standard deviation above and below the mean on PD ($M = 4.86$, $SD = 1.29$). Among participants who perceived low levels of discrimination against their ethnic group, MI was positively and significantly related to self-esteem ($\beta = .19$, $p < .05$). However, among participants who perceived high levels of discrimination against their group, MI was negatively related to self-esteem ($\beta = -.18$, $p < .07$), although this latter relationship was only marginally significant.

Discussion

Findings of this study confirmed our hypothesis that the relationship between perceived discrimination and personal self-esteem varies according to the content of individuals' worldview. Overall, endorsing merit ideology was uncorrelated with self-esteem (see O'Brien & Major, 2005, for similar findings), and perceptions of discrimination against one's ethnic group were uncorrelated with self-esteem (see Foster et al., 2006; Kaiser, Major, & McCoy, 2004; Major et al., 2003; McCoy & Major, 2003, for similar findings). Among Latino participants who strongly embraced MI, however, the more discrimination they perceived to exist against their ethnic group, the lower their personal self-esteem. This pattern is consistent with our hypothesis that perceiving discrimination against the ingroup threatens the worldview of members of devalued groups who believe the system is just and based on merit, resulting in lowered self-esteem. It is also consistent with the finding of Foster et al. (2006) that the more women and ethnic minorities felt they had personally been a victim of discrimination, the lower their psychological well-being.

Among Latinos who rejected a meritocracy worldview, in contrast, the more discrimination they perceived directed against their ethnic group, the higher their personal self-esteem tended to be. This positive relationship is consistent with the idea that perceived discrimination against the ingroup confirms the worldview of individuals who reject a view of the system as just and based on merit and in so doing, bolsters rather than threatens their self-esteem. This also replicates the positive relationship observed by Foster et al. (2006) between perceived personal experiences with discrimination and psychological well-being and provides a theoretical explanation for this counterintuitive relationship.

¹ When PWE and IMB are examined separately and simultaneously across the three studies reported here, the results are similar for the two components, although they differ somewhat in terms of relative contributions across the three studies. More detailed descriptions of these analyses are available from the authors.

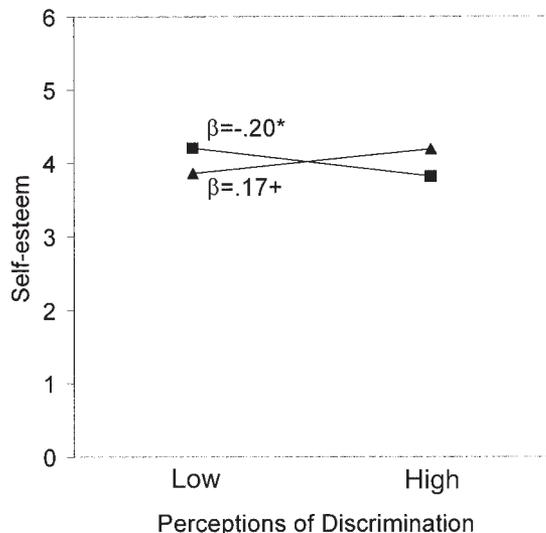


Figure 1. Study 1: The relationship between perceptions of discrimination and self-esteem among individuals who endorse or reject meritocracy ideology (MI). Solid triangles = low MI; solid squares = high MI. * $p < .05$. + $p < .09$.

Study 2

In Study 2, we provided a stronger test of our worldview verification model by manipulating rather than measuring perceptions of discrimination against the ingroup. Latino American students pretested for endorsement of MI were randomly assigned to read either an article describing evidence of pervasive prejudice against Latino/Americans or a control article describing pervasive prejudice against a non-self-relevant group. We predicted that among Latinos who strongly endorsed MI, merely reading an article documenting pervasive prejudice and discrimination against their ethnic group would lead to lower self-esteem compared with individuals in the control group. In contrast, we predicted that among Latinos who strongly rejected MI, reading an article documenting pervasive prejudice and discrimination against their ingroup would bolster their self-esteem compared with individuals in the control group because it validated the former's worldview.

Our use of a control group in which participants read about prejudice against another group provides a conservative test of our hypothesis. It is possible that evidence of blatant discrimination, regardless of who is the target, will threaten the self-esteem of people who endorse a worldview in which status is presumed to be deserved. If so, the self-esteem patterns we observed in our first study would not be specific to observing prejudice directed at one's own group within one's own system, but would also occur if prejudice or injustice was observed against any group, irrespective of its relationship to the self. The function of worldviews, however, is to provide a sense of stability, predictability, and certainty in one's own life. Lerner and Miller (1978) observed,

To witness and admit to injustices in other environments does not threaten people very much because these events have little relevance for their own fates. As events become closer to their world, however, the concern over injustices increases greatly, as does the need to explain or make sense of the event. (p. 1031)

Thus, we predicted that endorsement of a meritocracy worldview would moderate self-esteem among people exposed to prejudice that is self-relevant but not among people exposed to prejudice against a non-self-relevant group.

Study 2 also examined the implications of endorsing a meritocracy worldview for feelings of personal vulnerability to prejudice. We have proposed that endorsing a meritocratic worldview may provide an illusion of personal invulnerability to being a victim of prejudice among those who are members of devalued social groups (Major, Gramzow, et al., 2002). If one believes that outcomes are based on effort and that anyone can get ahead in American society, then one should not expect to be hindered by prejudice or feel particularly stressed by it. Consistent with this claim, endorsing MI is negatively related to perceiving the self as a victim of discrimination (Major, Gramzow, et al., 2002). Blatant evidence of discrimination against the ingroup, however, pierces the illusion of invulnerability that a meritocracy worldview provides. On the basis of this reasoning, we expected that in a control condition in which individuals were not exposed to prejudice against their own group, endorsing MI would be negatively related to perceived vulnerability to prejudice. In contrast, we expected that in the experimental condition, in which individuals encountered evidence that their ingroup was a target of prejudice, endorsing MI would be positively related to perceived vulnerability to prejudice.

Study 2 also tested our hypothesis that threat to the worldview prompts individuals to engage in efforts to defend or restore their worldview. As noted above, one way in which people attempt to restore a belief in a just world when it is threatened by an innocent victim is to blame the victim, for example, by derogating his or her character (Lerner & Simmons, 1966). We hypothesized that people whose meritocracy worldview is threatened by discrimination against their ingroup would similarly engage in a strategy of victim blame to restore their worldview. Specifically, we predicted that Latino students who strongly endorsed MI and who read that their ethnic group was a victim of pervasive prejudice would attempt to cognitively restore their worldview by blaming their ingroup—that is, by holding Latinos even more responsible for their position in society. In contrast, we predicted that Latino students who rejected MI and who read that their ethnic group was a victim of prejudice would not experience a threat to their worldview and, hence, would be highly unlikely to blame their group for its situation.

Method

Overview of Design and Participants

Fifty undergraduate Latino American students (82% women; age: $M = 18.59$ years, $SD = 0.76$) at the University of California, Santa Barbara participated in this experiment in exchange for course credit. Several weeks prior to the experiment, all had completed the same measure of MI as used in Study 1. Participants were randomly assigned to read an article describing the existence of pervasive prejudice against their own group or a non-self-relevant group.

Laboratory Procedure

Participants reported to the laboratory in small groups where they were met by a female experimenter who explained that the

study concerned peoples' reactions to newspaper articles. The experiment was run in conjunction with a related study, and consequently, approximately half of the students in each session were European American (these students provided no data for the current study). Participants were randomly assigned to read one of two fabricated newspaper articles.

Participants in the prejudice condition ($n = 24$) read an article describing an ostensible survey conducted by the "California Research Consortium." Participants learned that the survey, which examined 5,000 present University of California (UC) students and 5,000 recent UC alumni, revealed that Latinos faced pervasive prejudice (e.g., Latino Americans earned only 75% of what European Americans earned, even for the same job, even when they had equal amounts of experience; less than 15% of Latino American graduates held supervisory positions, whereas 68% of European American graduates held supervisory positions; between 80 and 85% of surveyed European American students held stereotypical attitudes about Latinos; and 60% of current Latino students reported experiencing some form of racism from European American students, faculty, and work supervisors). Finally, in order to increase the plausibility of the manipulation, participants read that 90% of the Latino UC alumni reported that while in college they did not recognize the extent to which racism would cause personal and professional barriers for them.

The remaining participants were assigned to a control condition ($n = 26$). The content and wording of the article they read was identical to the prejudice condition article, except the target of prejudice was a group to which they did not belong (Inuit) and their outcomes were compared with ethnic majority group members from Canada.

Measures

MI. To assess MI, participants completed the same 4-item measures of PWE and IMB used in Study 1. Scores on these measures were moderately correlated ($r = .46, p < .01$). As in Study 1, exploratory factor analysis indicated that participants perceived the PWE and IMB items as representing a single dimension rather than the separate components. Thus, we combined these scales to form a composite measure of MI ($\alpha = .69$). All analyses below are based on this composite measure.

Personal self-esteem. After reading their respective essay, participants completed the same measures of personal self-esteem (Global Self-Esteem: $\alpha = .86$; Social State Self-Esteem: $\alpha = .85$; Performance State Self-Esteem: $\alpha = .80$) completed in Study 1. Participants' scores on these three self-esteem measures were again averaged to form a single self-esteem measure (composite $\alpha = .89$).

Perceived vulnerability to prejudice. Participants completed a 2-item measure of perceived vulnerability to racism. These items were as follows: "Racism will prevent me from reaching my goals;" "I feel stressed about racist prejudice and discrimination"; $r = .56, p < .001$).

Victim blame. Participants completed a 2-item measure of group blame ("Latino/as are to some extent responsible for their low status in society" (reversed) "Latino/as are not at all to blame for their devalued status in society"; $r = -.41, p < .01$).

Manipulation check. Participants were asked to indicate what percentage of European Americans are prejudiced toward Latinos. Finally, participants were sensitively debriefed.

Results

Preliminary Analyses and Manipulation Check

There were no differences between experimental conditions in MI ($p > .49$), thus random assignment to experimental conditions was successful. On average, Latinos moderately endorsed MI ($M = 2.75$ on a 0–6 scale, $SD = .86$). Five participants reported suspicion regarding the validity of the article (3 in the prejudice condition and 2 in the control condition) and were dropped from the analyses.

The manipulation of perceived discrimination against the ingroup was successful. In a regression analysis with condition (ingroup prejudice condition = 0, control condition = 1) as a dichotomous variable and MI as a continuous variable, condition significantly affected participants' perceptions that European Americans are prejudiced against Latinos ($\beta = -.37, p < .05$). MI also was negatively related to the perception that European Americans are prejudiced toward Latinos ($\beta = -.29, p < .05$). However, the MI \times Condition interaction was not significant ($\Delta R^2 = .01, p = .75$), indicating that our manipulation had the same effect on perceived prejudice in both conditions, regardless of whether Latinos endorsed MI. This is important, as it rules out the possibility that any observed effects are simply the result of people interpreting the experimental stimuli differently, depending on their own status ideology.

Hypothesis Testing

We hypothesized that evidence that the ingroup is a target of discrimination would lead to lowered self-esteem, heightened perceived vulnerability to prejudice, and increased victim blame among Latino students who strongly endorsed a worldview in which status is believed to be based on merit and just, but not among those who rejected this worldview. To test our hypotheses, we conducted hierarchical regression analyses. We entered the effect of MI and prejudice condition (PC) on Step 1 and the interaction term on Step 2. Results of these analyses are summarized in Table 1.

Personal Self-Esteem

As shown in the left-hand column of Table 1, neither the main effect of PC nor the main effect of MI was a significant predictor of self-esteem. The predicted MI \times PC interaction, however, was significant. Among Latino students exposed to prejudice against their ingroup, MI was negatively related to personal self-esteem ($\beta = -.71, p < .05$). In contrast, among Latino students in the control condition, MI was unrelated to personal self-esteem ($\beta = .15, p = .39$). This interaction is shown in Figure 2.

To test our specific predictions, we tested the difference between the two simple regression lines at one standard deviation above (3.61) and below (1.89) the mean of the MI scale. These analyses revealed that self-esteem was lower among high MI endorsers in the prejudice condition compared with high MI endorsers in the control condition; although this difference only

Table 1
 Study 2: Model Summary of Hierarchical Regression Analyses
 Examining Self-Esteem, Group Blame, and Perceived
 Vulnerability

Analysis	Self-esteem		Group blame		Vulnerability	
	β	ΔR^2	β	ΔR^2	β	ΔR^2
Step 1: MI and prejudice manipulation		.01		.16*		.11
MI	-.06		.10		-.17	
IP vs. C	-.04		.38*		-.27	
Step 2: Two-way interaction		.14*		.08*		.12*
MI \times IP vs. C	.75*		-.58*		-.72*	

Note. Standardized regression coefficients are reported from the step on which each variable was first entered. MI = meritocracy ideology; IP = ingroup prejudice condition; C = control condition. * $p < .05$.

approached significance ($\beta = .42, p = .09$). In contrast, self-esteem was significantly higher among low MI endorsers in the prejudice condition compared with low MI endorsers in the control condition ($\beta = -.44, p = .05$).

Perceived Vulnerability to Prejudice

Results of the analysis of perceived vulnerability to prejudice are summarized in the right-hand column of Table 1. Only the MI \times PC interaction was significant ($\beta = -.72, p < .02$). As predicted, MI was negatively related to perceived vulnerability to prejudice in the control condition ($\beta = -.36, p < .05$), such that the more individuals in the control condition endorsed MI, the less vulnerable they felt to being a target of prejudice. In contrast, there was a marginal positive relationship between MI and perceived vulnerability to prejudice in the prejudice condition ($\beta = .47, p = .11$). See Figure 3.

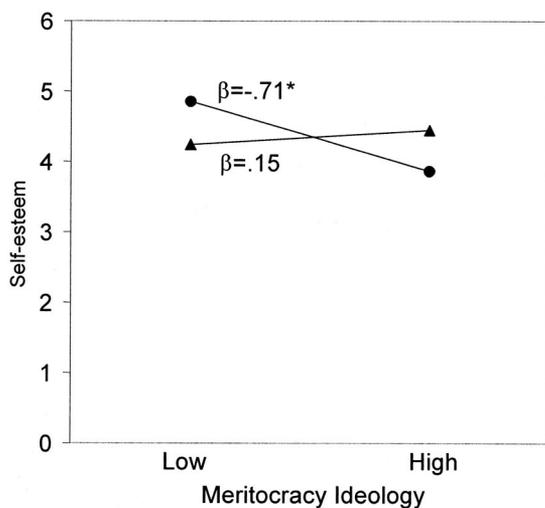


Figure 2. Study 2: The impact of prejudice condition and meritocracy ideology (plotted one standard deviation above and below the mean) on personal self-esteem. Solid triangles = control condition; solid circles = ingroup prejudice condition. * $p < .05$.

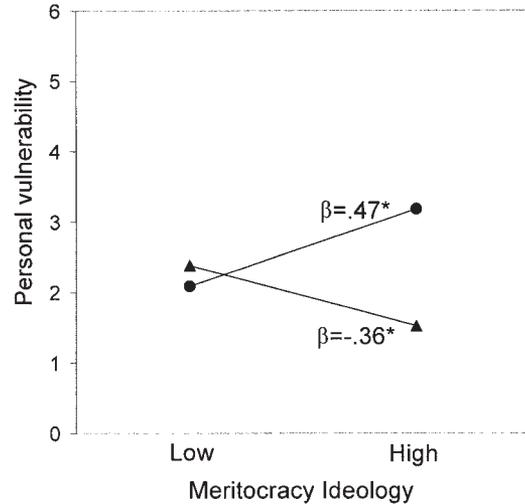


Figure 3. Study 2: The impact of prejudice condition and meritocracy ideology (plotted one standard deviation above and below the mean) on perceived vulnerability to prejudice. Solid triangles = control condition; solid circles = ingroup prejudice condition. * $p < .05$.

We also tested the difference between the two simple regression lines at one standard deviation above (3.61) and below (1.89) the mean of the MI scale. Individuals who rejected MI did not differ in perceived vulnerability to prejudice as a function of condition ($\beta = .13, p = .55$). Exposure to prejudice against their group did not increase their (already high) sense of vulnerability to racism. In contrast, those who strongly endorsed MI felt significantly more vulnerable to prejudice in the prejudice condition as compared with the control condition ($\beta = -.71, p < .01$).²

Victim Blame

Results of the analysis of victim blame are summarized in the middle column of Table 1. A significant main effect of PC indicated that Latino students who read that Latinos are targets of pervasive discrimination were less likely to blame Latinos for their lower social status than were Latino students in the control group. This effect was qualified, however, by a significant MI \times PC interaction. Among Latinos who read about pervasive prejudice

² According to a worldview verification perspective, discrimination against the ingroup threatens the worldview of those who endorse MI, resulting in increased feelings of personal vulnerability. These increased feelings of personal vulnerability, in turn, may mediate the lower self-esteem observed among these individuals in response to discrimination. To test this possibility, we conducted a hierarchical regression analysis following recommendations of Kenny, Kashy, and Bolger (1998). We entered perceived vulnerability to racism on Step 1, MI and PC on Step 2, and the MI \times PC interaction on Step 3, predicting self-esteem. Perceived vulnerability significantly predicted self-esteem ($\beta = -.35, p < .05$), such that the more personally vulnerable participants felt, the lower their self-esteem. Once perceived vulnerability was controlled for, the MI \times PC interaction no longer significantly predicted self-esteem ($\beta = .39, p = .20$). Thus, feelings of personal vulnerability significantly mediated the interaction of MI and prejudice condition on self-esteem (Goodman II, one-tailed: $Z = 1.75, p < .05$).

toward their own ethnic group, the more strongly they endorsed MI, the more likely they were to blame Latinos for their low status ($\beta = .61, p < .05$). In the control condition, in contrast, MI was unrelated to victim blame ($\beta = -.06, p = .72$). See Figure 4.

In addition, we tested the difference between the two simple regression lines at one standard deviation above (3.61) and below (1.89) the mean of the MI scale. These analyses revealed that low MI endorsers were significantly less likely to blame their group in the prejudice condition compared with the control condition ($\beta = .69, p < .01$). In contrast, high MI endorsers blamed their ingroup for its status as much in the prejudice condition as they did in the control condition ($\beta = .02, p = .94$).

Discussion

Study 2 provided further support for our hypothesis that reactions to discrimination depend upon the target's worldview. Latino students who read that their ethnic group was a victim of pervasive discrimination had lower self-esteem than a control group (students who read about prejudice against a non-self-relevant group) to the extent that they endorsed MI but higher self-esteem to the extent that they rejected this ideology. These findings are consistent with our worldview verification perspective. Perceiving discrimination against the ingroup threatens the worldview of individuals who embrace MI, with consequent negative implications for their self-esteem. In contrast, it confirms the worldview of individuals who reject MI. For the latter group, perceived discrimination against the ingroup may provide social validation for their personal understanding of the world, thereby boosting their self-esteem. Data consistent with a worldview verification perspective also were obtained by Foster and Tsarfati (2005), who found that women who believed in meritocracy had higher self-esteem if they were rejected as a result of merit rather than due to gender discrimination, whereas women who disbelieved in meritocracy

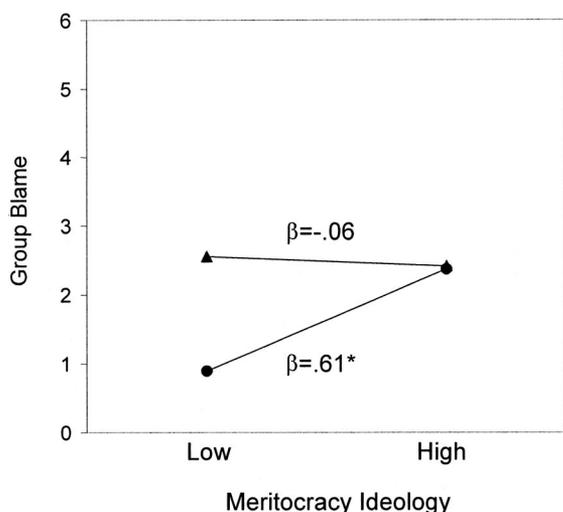


Figure 4. Study 2: The impact of prejudice condition and meritocracy ideology (plotted one standard deviation above and below the mean) on victim blame. Solid triangles = control condition; solid circles = ingroup prejudice condition. * $p < .05$.

had higher self-esteem if they were rejected as a result of gender discrimination rather than because of lack of merit.

We argue that endorsing a meritocracy worldview can be psychologically beneficial for members of disadvantaged groups in part because it provides an illusion of personal invulnerability to prejudice (Major, Gramzow, et al., 2002). Consistent with this claim, we found that greater endorsement of MI was associated with a lower sense of personal vulnerability to prejudice among individuals in the control condition of Study 2. We also found that meritocracy endorsers, but not meritocracy rejecters, tended to experience increased feelings of personal vulnerability to prejudice when they were exposed to evidence of blatant discrimination against their ingroup. Thus clear evidence of prejudice against their ingroup pierced their illusion of personal invulnerability.

Findings for ingroup blame, although not exactly the pattern we expected, are nonetheless consistent with the idea that people are motivated to defend their worldviews when they are threatened. We hypothesized that individuals who endorse MI experience discrimination against their ingroup as a threat to their worldview. In response, they blame their own group for its low status in society in an effort to restore their worldview. Consistent with this hypothesis, we observed a positive relationship between endorsement of MI and ingroup blame, but only among participants who read about prejudice against their ingroup. Latinos who rejected a meritocracy worldview blamed Latinos for their position in society significantly less if they read that discrimination against Latinos is pervasive than if they read the control article. Latinos who endorsed a meritocracy worldview, in contrast, blamed their ingroup just as much in the prejudice condition as they did in the control condition. Thus meritocracy endorsers did not reduce the extent to which they held their ingroup responsible for its position (an internal attribution for low status) when they read that their ingroup is a pervasive target of discrimination (an external attribution for low status), whereas meritocracy rejecters did. Consequently, high and low meritocracy endorsers did not differ in the extent to which they held their ingroup responsible for its low status in the control condition, but high endorsers blamed their ingroup significantly more than did low endorsers in the prejudice condition.

Study 3

Our first two studies found that among members of a low-status ethnic group, the perception that others discriminate against their group was associated with (Study 1) or led to (Study 2) lower self-esteem among individuals who strongly endorsed MI but to higher self-esteem among those who strongly rejected this ideology. We theorize that this occurs because discrimination threatens the worldview of individuals who believe that social and material goods are based on merit, undermining core beliefs that provide meaning and value. In contrast, discrimination confirms the worldview of individuals who reject a meritocratic view of society, corroborating their understanding of the world.

It could be argued, however, that blatant discrimination against the ingroup decreased the self-esteem of meritocracy endorsers not because it posed a threat to their worldview, but because it posed a personal threat by increasing their feelings of personal vulnerability to racism. These feelings of personal vulnerability, in turn, led to their lowered self-esteem. It is difficult to tease apart

personal threat from worldview threat explanations because threats to one's worldview are assumed to increase feelings of personal threat and vulnerability (Greenberg et al., 1997). Even so, this explanation cannot account for the findings for meritocracy rejecters. First, because individuals who reject MI chronically feel more personally vulnerable to being a victim of racism than do meritocracy endorsers (as shown in the control condition of Study 2), this argument leads one to expect that individuals who reject meritocracy will generally have lower self-esteem than will individuals who endorse it. In fact, as Study 1 demonstrates, endorsement of MI is unrelated to self-esteem among members of disadvantaged groups overall (see also Foster et al., 2006; O'Brien & Major, 2005). Second, this argument cannot explain why individuals who reject a meritocracy worldview report higher self-esteem the more they perceive themselves or their ingroup as targets of discrimination (Study 1; Foster et al., 2006) or when they read about pervasive prejudice against their own group as opposed to a non-self-relevant group (Study 2). In contrast, these findings can be explained parsimoniously by a worldview verification model. Attacks on one's core beliefs about the world (beliefs that provide meaning and value) threaten self-esteem, whereas confirmations of one's core beliefs about the world bolster self-esteem.

We designed Study 3 to provide an even stronger test of a worldview verification model. Members of a low-status group (women) were randomly assigned to read one of two articles: one describing prejudice against women as pervasive or one describing prejudice against women as rare. From a worldview verification perspective, evidence that discrimination against one's group is rare violates the worldview of individuals who reject MI but confirms the worldview of individuals who endorse MI. Hence, it leads to the counterintuitive prediction that individuals who reject MI will have lower self-esteem if they read that prejudice against their group is rare (because this violates their worldview) than if they read that it is pervasive (because this confirms their worldview). Just the reverse should be observed among individuals who endorse MI. Furthermore, MI should be positively related to self-esteem among women given information that discrimination against women is rare but negatively related to self-esteem among women given information that discrimination against women is pervasive. Neither the group-consciousness theories (e.g., Bowles & Klein, 1983) nor the shattered assumptions model of coping with trauma (Janoff-Bulman, 1989, 1992) lead to these predictions.

As in Study 2, we also tested the hypothesis that the more strongly individuals endorse a meritocracy worldview, the more they would react to evidence of pervasive prejudice against their group by attempting to restore their worldview. Thus, we predicted that compared with women in the rare prejudice condition, women who read that women are victims of pervasive prejudice would be more likely to blame women for their lower status if they strongly endorsed MI, but would be less likely to blame women for their lower status if they strongly rejected MI.

Method

Overview of Design and Participants

Fifty-eight undergraduate women (age: $M = 18.27$ years, $SD = 0.62$) were randomly assigned to one of two experimental conditions: pervasive prejudice or rare prejudice. All received \$10 in

exchange for participation in the experiment. Most were European American (53.4%), with the remainder reporting Asian American (17.2%), Latina American (12.1%), African American (1.7%), Native American (1.7%), or "other" (13.8%) racial/ethnic backgrounds.³ All had completed measures of MI in a large mass testing session several months prior to the experiment.

Laboratory Procedure

Participants reported to the laboratory in small groups where they were met by a female experimenter who explained that the study concerned peoples' reactions to essays. One half ($n = 28$) read an essay describing prejudice against women as pervasive (pervasive condition) and the other half ($n = 30$) read an essay describing prejudice against women as rare (rare condition).⁴ The exact wording of the pervasive prejudice article was as follows:

As you are probably aware, women still face widespread discrimination and sexism in many important areas of life. Women still routinely face discrimination and inequality in employment, education, politics, the courtroom, and in everyday interpersonal interactions. Women make 75% of what men do, even for the same job and when they have equal amounts of experience. Recent psychological research has shown that between 90%–95% of men hold sexist attitudes and will discriminate against women given the opportunity. Men generally rate women as incompetent, irrational, and weak. In a survey of American men last year, over 65% said they thought women should stay home and raise kids.

The other half of participants read an essay describing prejudice against women as rare (rare condition). The wording of the rare condition was as follows:

As you are probably aware, discrimination against women is becoming less common in many important areas of life. Women now face relatively infrequent discrimination in employment, salary, education, politics, the courtroom, and in everyday interpersonal interactions. Many economists predict that the salaries of men and women who perform similar jobs will be equal by the year 2005. Recent psychological research has shown that between 90 and 95% of men hold nonsexist attitudes and refuse to discriminate against women even if given the opportunity to do so. Men generally see women as competent, rational, and strong. In a survey of American men last year, only 6.5% said that they thought women should stay home and raise kids.

After reading their respective essay, participants completed measures indicating the extent to which they thought others viewed their gender favorably (which served as a manipulation check), personal self-esteem, and victim blame, in that order. Finally, participants were carefully debriefed and provided with accurate information about sexism and its effects on women.

Measures

MI. Several months prior to the experimental session we assessed MI by measuring PWE and IMB using the same two 4-item

³ When added as a covariate, ethnicity (0 = European American, 1 = all other ethnic groups) was not significant in any analyses. Hence, it was not included as a variable in subsequent analyses.

⁴ We appreciate receiving these paragraphs from Michael Schmitt. They are identical to the paragraphs used in Schmitt, Branscombe, and Postmes (2003).

scales as in Studies 1 and 2. PWE and IMB were moderately correlated with each other ($r = .43$). As in the prior studies, exploratory factor analysis indicated that participants perceived the PWE and IMB items as representing a single dimension rather than the separate components. Thus, we combined these scales to form a composite measure of MI ($\alpha = .74$). All analyses below are based on this composite measure.⁵

Personal self-esteem. Self-esteem was assessed with the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1979) and the 7-item Social Self-Esteem subscale of Heatherton and Polivy's (1991) State Self-Esteem Scale. The Rosenberg Self-Esteem Scale ($\alpha = .89$) and the Social Self-Esteem subscale (social $\alpha = .87$) were both reliable. Because the two self-esteem scales were highly correlated ($r = .68, p < .001$), we aggregated them into a composite measure of personal self-esteem ($\alpha = .92$).

Victim blame. Victim blame was assessed during the laboratory session with the following two items: "It is to some extent women's own fault that they haven't achieved as much power as men" and "The life choices women make are partially responsible for why they are paid less than men" ($r = .58, p < .01$). These items were rated on scales with endpoints of 0 (*strongly disagree*) to 6 (*strongly agree*).

Manipulation check. As a check on the effectiveness of the perceived prejudice manipulation, participants completed Luhtanen and Crocker's (1992) 4-item Public Regard Scale assessing their perceptions of how others view their group: "In general, others respect the gender group I am a member of"; "Overall, my gender group is considered good by others"; "Most people consider my gender group, on the average, to be more ineffective than the other gender group"; and "In general, others think that the gender group I am a member of is unworthy" (last two items reversed; $\alpha = .57$). These items were rated on 7-point scales with endpoints of 0 (*strongly disagree*) and 6 (*strongly agree*).

Results

Preliminary Analyses

Endorsement of MI was moderate in this sample ($M = 2.67$ on a 0–6 scale, $SD = 0.77$). There were no differences between experimental conditions on pretesting measures of MI ($p > .16$). Thus, random assignment to conditions was successful.

Manipulation Check

The manipulation of perceived prejudice was successful. In a regression analysis with condition (pervasive condition = 0, rare condition = 1) as a dichotomous variable and MI as a continuous variable, condition significantly affected participants' perception that women as a group are valued by society ($\beta = .29, p < .05$). Women in the rare condition were more likely to report that women are valued by society compared with women in the pervasive condition. MI was positively related to the perception that women as a group are valued by society, although this relationship was only marginally significant ($\beta = .22, p < .10$). Finally, adding the MI \times Condition interaction term on Step 2 did not significantly increase R^2 .

Personal Self-Esteem

We conducted hierarchical regression analyses to test our hypothesis that the effects of perceived discrimination against the ingroup on self-esteem vary depending on worldview. We entered the MI main effect and the experimental condition main effect on Step 1. On Step 2 we entered the MI \times Condition interaction term. Results of this analysis are summarized in Table 2. There were no significant main effects for MI or condition on Step 1. The predicted MI \times Condition interaction was significant on Step 2 ($\Delta R^2 = .18, p < .01$) and is shown in Figure 5. Examination of the simple slopes reveal that, as predicted, MI was negatively and significantly related to self-esteem in the prejudice condition ($\beta = -.49, p < .01$) and was positively and significantly related to self-esteem in the rare condition ($\beta = .38, p < .05$).

To test our specific predictions we tested the difference between the simple regression lines at one standard deviation above and below the mean of the MI scale. These analyses revealed that women who strongly endorsed MI (3.45 on a 0–6 scale) had significantly lower self-esteem in the pervasive prejudice condition compared with those in the rare prejudice condition ($\beta = .42, p < .05$). These findings are consistent with Study 2 and with our hypothesis that prejudice directed against the ingroup threatens the worldview, and hence the self-esteem, of people who endorse MI. Findings were quite different for women who rejected MI. Consistent with our worldview verification model, women who scored low on the measure of MI (1.79 on a 0–6 scale) had significantly higher self-esteem in the pervasive prejudice condition compared with those in the rare prejudice condition ($\beta = -.45, p < .05$). This pattern is consistent with our hypothesis that learning that prejudice against one's group is rare threatens the worldview of women who reject MI.⁶

Victim Blame

We used the same analytic approach to examine the impact of MI and prejudice condition on the worldview defense strategy of

⁵ During the same testing session, we also asked participants to complete a 4-item measure of BJW (for others) adapted from Lipkus et al. (1996). These items were as follows: "I feel that people get what they deserve," "I feel that people treat each other with the respect that they deserve," "I feel that people get what they are entitled to have," and "I feel that people earn the punishments and rewards they get." We included BJW to see whether the effects observed in our first two studies were unique to our operationalization of MI or whether they would generalize to a different meritocratic belief. Like PWE and IMB, BJW taps into an ideology in which individuals are seen as deserving their status in society. BJW was moderately correlated with PWE ($r = .38$) and IMB ($r = .45$).

⁶ We conducted an identical series of regression analyses in which we entered BJW rather than MI into regression equations predicting our dependent measures. These analyses revealed a similar pattern of results. For example, the hypothesized Ideology \times Condition interaction predicting self-esteem was significant ($\beta = .34, p < .05$), and the pattern of this interaction was the same as for MI. These analyses demonstrate that the effects observed in our first two studies are not unique to the way we operationalized MI but generalize to another meritocratic ideology, BJW. So as to maintain consistency across studies, the analyses we report here are based on the composite measure of MI (PWE and IMB) that we used in our first two studies.

Table 2
 Study 3: Model Summary of Hierarchical Regression Analyses
 Examining Self-Esteem and Group Blame

Analysis	Self-esteem		Group blame	
	β	ΔR^2	β	ΔR^2
Step 1: MI and prejudice manipulation		.02		.15*
MI	-.12		.38**	
P vs. R	-.00		-.19	
Step 2: Two-way interaction		.18**		.07*
MI \times P vs. R	.56**		.35*	

Note. Standardized regression coefficients are reported from the step on which each variable was first entered. MI = meritocracy ideology; P = prejudice condition; R = rare condition.
 * $p < .05$. ** $p < .01$.

victim blame. Results are summarized in Table 2. A significant main effect of MI indicated that women who endorsed MI were more likely to blame women for their lower social status. This effect was qualified, however, by a significant Condition \times MI interaction. This interaction is shown in Figure 6. As predicted, MI was positively related to victim blame among participants in the pervasive prejudice condition ($\beta = .61, p < .01$) but was unrelated to victim blame in the rare prejudice condition ($\beta = .06, p = .74$).

To test our specific predictions, we also tested the difference between the simple regression lines at one standard deviation above and below the mean of the MI scale. Among those high in MI, victim blame was higher in the prejudice condition compared with that in the rare condition ($\beta = -.46, p < .01$). This pattern is consistent with our prediction that discrimination threatens the worldview of individuals who strongly believe in a meritocracy worldview, leading them to attempt to restore their worldview by blaming the victim, even though the victim is their own group. In contrast, among those low in MI, victim blame was equally low in

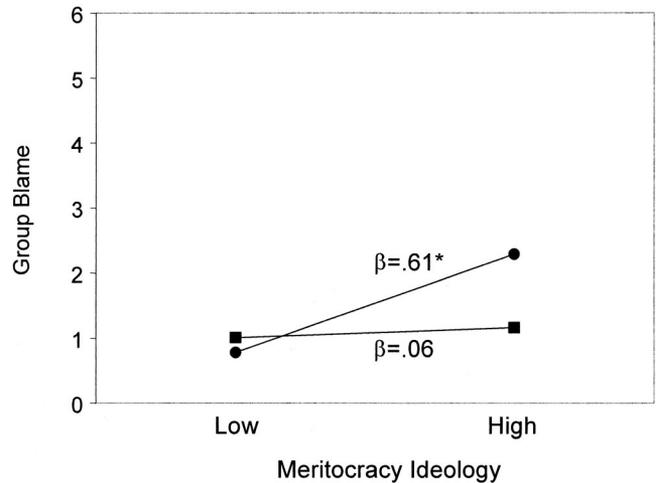


Figure 6. Study 3: The impact of prejudice condition and meritocracy ideology (plotted one standard deviation above and below the mean) on victim blame. Solid circles = pervasive prejudice condition; solid squares = rare prejudice condition. * $p \leq .05$.

both the pervasive prejudice and the rare prejudice conditions ($\beta = .09, p = .60$).

Discussion

Study 3 provided further evidence that the effects of perceived prejudice on self-esteem vary as a function of targets' worldview. Among individuals who strongly endorsed MI, reading that prejudice against their group is pervasive decreased their self-esteem relative to reading that prejudice against their group is rare. In contrast, among individuals who rejected MI, reading that prejudice against their group is pervasive increased their self-esteem relative to reading that prejudice against their group is rare. In future studies, including a neutral or baseline condition will allow for determination of whether self-esteem increased in response to confirmation of one's worldview, or decreased in response to threat to one's worldview, or both.

Study 3 also showed the predicted effects of worldview threat on ingroup blame. As in Study 2, MI was positively related to ingroup blame, but only in the condition in which participants read about pervasive prejudice against their own group. Women who strongly endorsed MI were more likely to blame women for their low status when they read that sexism was pervasive rather than rare. In contrast, women who rejected MI were unlikely to blame women for their low status, regardless of whether they read that sexism was pervasive or rare.

GENERAL DISCUSSION

The current research tested the hypothesis that targets' worldviews moderate the relationship between perceived discrimination against the self (or ingroup) and self-esteem. Across three studies, we found that perceived discrimination against the ingroup, whether measured as an individual difference variable or manipulated experimentally, was unrelated to personal self-esteem overall (see also Foster et al., 2006; Kaiser, Major, & McCoy, 2004;

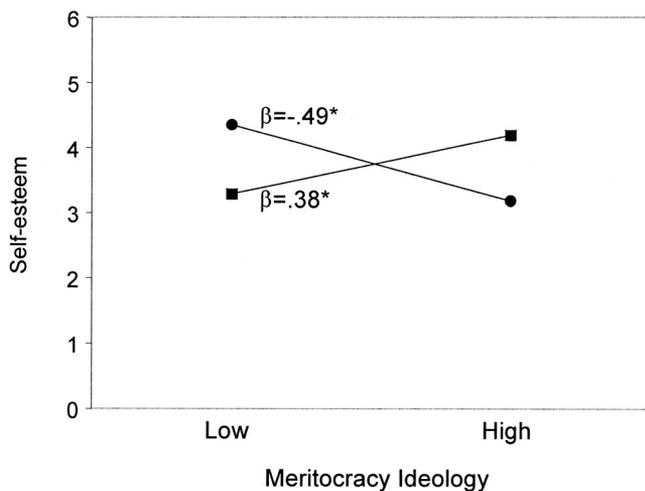


Figure 5. Study 3: The impact of prejudice condition and meritocracy ideology (plotted one standard deviation above and below the mean) on personal self-esteem. Solid circles = pervasive prejudice condition; solid squares = rare prejudice condition. * $p \leq .05$.

Major et al., 2003; McCoy & Major, 2003, for similar findings). For some participants—Latino Americans and female participants who strongly embraced a meritocracy worldview—perceiving discrimination against their ethnic or gender group led to lower self-esteem. This pattern is consistent with theories that propose that perceived devaluation of one's social identity will result in lower personal self-esteem (e.g., Branscombe, Schmitt, & Harvey, 1999). In contrast, for other participants—Latino American and female participants who rejected a meritocracy worldview—perceived discrimination against their ethnic or gender group led to higher self-esteem. This pattern is consistent with theories that predict that perceiving others to be prejudiced against one's social identity can serve a self-esteem protective function for members of socially devalued groups to the extent that it provides a more external attribution for one's own or one's groups' social disadvantage (e.g., Crocker & Major, 1989; Major, Quinton, & McCoy, 2002).

We believe that a worldview verification perspective provides a parsimonious explanation for these findings. According to this framework, status explanatory beliefs or ideologies are core aspects of one's worldview; they are often implicit and unquestioned, and they help to satisfy humans' fundamental need for meaning and value. Hence, self-relevant information that confirms one's status ideology should increase feelings of security, certainty, and self-esteem, whereas self-relevant information that threatens one's status ideology should increase feelings of vulnerability and uncertainty and decrease self-esteem (Janoff-Bulman, 1989; Kaiser, Vick, & Major, 2004; Lerner, 1980; Solomon et al., 1991).

Members of socially disadvantaged groups who endorse MI perceive little discrimination against themselves or their group (Major, Gramzow, et al., 2002) and feel less vulnerable to personally being a target of prejudice (Study 2). Although this illusion of invulnerability has a variety of beneficial psychological consequences, it also comes with costs. Exposure to blatant discrimination against their ingroup increases their sense of personal vulnerability to being a target of prejudice, and more important, it challenges their faith in their worldview. It calls into question their assumptions about how the world works and whether they meet cultural standards of value. By undermining meaning and value, discrimination threatens their self-esteem. Evidence that discrimination against their ingroup is rare, in contrast, affirms and provides external validation for a meritocracy worldview. On the basis of this reasoning, we predicted that the self-esteem of individuals who endorse MI would suffer in response to perceiving their ingroup as a victim of pervasive discrimination but would rise in response to evidence that discrimination against their group is rare.

Despite the pervasiveness of meritocracy cues in American society, not everyone subscribes to this dominant cultural worldview. For some, such as those who have repeatedly experienced discrimination or witnessed discrimination against others like themselves, maintaining faith in a meritocracy is difficult, as it neither matches their reality nor provides much basis for deriving self-worth. If success is possible for any individual within the culture, and they personally or their group as a whole are not successful, how does this worldview impart value? An alternative worldview in which social status is explained in terms of bias, discrimination, and favoritism may provide a more meaningful depiction of reality and a better foundation for deriving a sense of

personal value by explaining personal and collective social disadvantage in terms of discrimination rather than internal, stable causes such as lack of merit (Crocker & Major, 1989; Major et al., 2002).

For those who reject meritocracy and embrace this alternative worldview, exposure to compelling evidence that discrimination against their ingroup is rare or nonexistent is threatening. It calls into question their assumptions about how status is accorded in society, undermines the validity of discrimination as an explanation for the lower social status of their social group, and implies that the criteria for being a person of value within the culture may indeed be merit-based. By undermining meaning and value, evidence that discrimination against their group is rare poses a threat to their self-esteem. In contrast, blatant evidence of discrimination against their ingroup, rather than threatening their worldview, validates it. A worldview verification perspective thus leads to the counterintuitive prediction that individuals who reject a meritocracy worldview experience an increase in self-esteem in response to blatant discrimination against their ingroup but a decrease in self-esteem in response to clear evidence that discrimination against their ingroup is rare.

Results of three studies provided support for these predictions. Individuals who endorsed MI reported lower self-esteem the more they perceived their ingroup as a victim of pervasive discrimination (Study 1), when they were exposed to evidence of pervasive discrimination against their own group as opposed to a non-self-relevant group (Study 2), and when they were exposed to evidence that discrimination against their group was pervasive as opposed to rare (Study 3). In contrast, individuals who rejected MI reported higher self-esteem the more they perceived their ingroup as a victim of pervasive discrimination (Study 1), when they read that their ingroup (vs. a non-self-relevant group) was a victim of pervasive discrimination (Study 2), and when they read that discrimination against their ingroup was pervasive compared with when they read that it was rare (Study 3).

Effects observed for ingroup blame also supported a worldview verification perspective. We hypothesized that members of low-status groups who endorse a meritocracy worldview would respond to blatant discrimination against their ingroup by increasing the extent to which they blamed the victim, even though the victim was their own group. Both Studies 2 and 3 showed that among participants exposed to evidence of pervasive discrimination against their ingroup, the more they endorsed MI, the more they blamed their own group for its position in society. In contrast, we found no relationship between endorsing MI and ingroup blame among participants who read about prejudice against a non-self-relevant group (Study 2) or who read that prejudice against their ingroup is rare (Study 3).

Although the pattern of the interactions between MI and prejudice condition was similar in Studies 2 and 3, some differences were observed. Most notably, effects of experimental condition on ingroup blame were most apparent among Latino students low in MI in Study 2 and among women high in MI in Study 3. These differences may be due to specific features of the samples (Latinos vs. women) and/or to differences in the comparison conditions in these studies (prejudice against a non-self-relevant group vs. rare prejudice against ingroup). Although both patterns can be understood within a worldview threat perspective, the pattern observed in Study 3 was more consistent with our expectations in that it

showed an increase in ingroup blame among merit endorsers who read that discrimination against their ingroup was pervasive, as compared with those who read that discrimination against their ingroup was rare.

Threat Versus Attributions

In this article, we emphasize the impact of worldviews on self-esteem via feelings of security or threat. It is important to note, however, that worldviews can also influence self-esteem by shaping the attributions that people make for their successes or failures in life. Because a belief in meritocracy locates the source of social inequalities in individual differences in effort, talent, and deservingness, endorsing meritocratic beliefs can lead people to make internal attributions for the status of themselves and their group (Major, 1994). Thus, members of devalued groups who endorse MI may be more likely to blame negative treatment on themselves, leading to lower self-esteem, whereas those who reject this ideology may be more likely to blame negative treatment on discrimination rather than on themselves, thereby buffering their self-esteem (Crocker & Major, 1989).

This attributional perspective has guided much of our own prior research. We have shown, for example, that among low-status groups, endorsing or activating MI is associated with a reduced likelihood of attributing rejection to prejudice (Major, Gramzow, et al., 2002; McCoy & Major, 2007) and a reduced sense of entitlement (O'Brien & Major, in press). Furthermore, we have shown that attributing negative outcomes to discrimination rather than to internal, stable aspects of the self is associated with higher self-esteem (Major, Kaiser, & McCoy, 2003; see Major et al., 2002, for a review).

Nonetheless, we do not believe that an attributional model alone is sufficient to understand the relationship between meritocracy and self-esteem among devalued groups. First, an attributional perspective leads to the prediction that endorsing meritocratic ideologies will be associated with lower self-esteem among low-status groups because it leads them to internalize their disadvantage (e.g., Crocker & Major, 1989; Jost & Hunyady, 2002; Quinn & Crocker, 1999). Recent studies, however, have shown no evidence of an overall negative relationship among low-status groups between MI and self-esteem (Foster & Tsarti, 2005; O'Brien & Major, 2005). Nor did we observe a significant negative relationship overall between MI and self-esteem among women or Latino Americans in any of the three studies reported here.

Second, an attributional model cannot explain why women in Foster and Tsarfati's (2005) study who endorsed meritocracy had higher self-esteem if they were rejected as a result of a lack of merit than as a result of discrimination. Being rejected because of a lack of merit should lead to internal attributions, especially among those who endorse meritocracy, and consequently to lower self-esteem. A worldview verification model, in contrast, can explain this finding.

Third, an attributional model implies that the relationship between ideology and self-esteem is mediated by attributions of blame or responsibility (either to self or to ingroup). In order to test this hypothesis in the current research, we examined whether group blame mediated the relationship observed in Studies 2 and 3 between MI and self-esteem among individuals exposed to prejudice against their own group. In these analyses, we entered victim

blame on the first step of a hierarchical moderated regression analysis predicting self-esteem, followed by MI and PC on Step 2 and the MI \times PC interaction on Step 3. We found no evidence that group blame mediated the self-esteem effects in either study. For example in Study 2, victim blame did not significantly predict self-esteem ($\beta = .12, p = .42$). In addition, the original MI \times PC interaction remained significant on Step 3 and, in fact, increased in strength ($\beta = .80, p < .01$). Analyses of the data from Study 3 revealed a similar pattern. Thus, we found no evidence that blaming the ingroup for its position in society mediated the negative relationship between MI and personal self-esteem among those exposed to ingroup prejudice. In one of the few other studies to examine this hypothesis, Quinn and Crocker (1999) examined whether perceiving weight as controllable (a belief that blames the overweight for their stigma) would mediate the negative relationship they observed between endorsing an MI (PWE) and self-esteem among very overweight women. They found that perceiving weight as controllable was negatively related to the self-esteem of very overweight women, but it did not mediate the negative relationship observed between ideology and self-esteem among these women.

In summary, we believe that worldviews influence self-esteem by two routes: They interact with environmental cues to influence self-esteem directly via feelings of security or threat, and they also influence self-esteem indirectly by shaping the attributions that people make for their own and their groups' social and material status. Although our studies cannot compare the conditions under which these threat and attributional pathways affect self-esteem when faced with prejudice, this is an important direction for future research. Prior research demonstrating the mediating role of attributions has focused on the self-esteem consequences of being able to blame a personally experienced negative event on discrimination instead of on one's personal deficiencies (e.g., Crocker, Voelkl, Testa, & Major, 1993; Major, Quinton, & Schmader, 2003). In contrast, the present research focuses on inequality and blame at the collective level rather than at the individual level. It is possible that we might have found support for an attributional mediator had we measured blame and self-esteem at the same level; that is, personal blame might predict personal self-esteem, and collective-level blame might predict collective self-esteem. Thus, it will be useful to include measures of collective self-esteem in studies aimed at comparing the two routes by which worldviews affect self-esteem when faced with discrimination. Additionally, because members of devalued groups may be unwilling to publicly state that their group is responsible for its own disadvantage, it may be worth pursuing a more indirect measurement strategy for assessing blame.

Status Ideologies and Self-Esteem Among Low-Status Groups

The current research contributes to an emerging literature on the psychological implications of endorsing system-justifying beliefs such as a belief in meritocracy for members of socially devalued groups (Foster et al., 2006; Foster & Tsarfati, 2005; Jost & Hunyady, 2002; Major & Schmader, 2001; O'Brien & Major, 2005). Scholars have often assumed that endorsing such ideologies will be associated with higher self-esteem among high-status groups but lower self-esteem among low-status groups (e.g.,

Crocker & Major, 1989; Jost & Hunyady, 2002; Quinn & Crocker, 1999). As noted above, although there is ample evidence of a positive relationship between meritocracy endorsement and self-esteem among high-status groups, there is little evidence of a negative relationship among low-status groups. Indeed, in the present research we found that endorsing MI was positively and significantly related to self-esteem among members of low-status groups who did not perceive their group to be a target of prejudice (Study 1) or who were exposed to evidence that prejudice against their group is rare (Study 3). Foster and colleagues (Foster et al., 2006) also observed a positive relationship between MI and self-esteem among members of low-status groups who did not perceive themselves personally to have been a victim of discrimination.

We believe that scholars have underestimated the psychological benefits that endorsing meritocratic and other system-justifying ideologies may accord to individuals, even those who are in positions of low social status. Endorsing meritocracy buffers members of stigmatized groups from seeing themselves as devalued. Our prior research has shown that endorsing a meritocracy worldview protects members of low-status groups from seeing themselves as having been a target of prejudice and reduces their likelihood of perceiving themselves as targets of discrimination in ambiguous circumstances (Major, Gramzow, et al., 2002). In the current research, we found that endorsing MI was associated with feelings of reduced vulnerability to prejudice in the control condition of Study 2. Because prejudice and discrimination are often subtle, disguised, and difficult to detect with certainty, endorsing MI may thus prevent members of socially disadvantaged groups from seeing themselves as targets of discrimination across many types of situations (Crosby, Clayton, Alksnis, & Hemker, 1986; Feldman-Barrett & Swim, 1998). In short, endorsing meritocracy may provide an illusion of fairness and/or safety.

This raises the question of whether the effects observed in the current research simply reflect differences between people who endorsed versus rejected MI in how they interpreted the experimental manipulations. There are two reasons why we do not believe this was the case. First, we designed the discrimination information in these studies to be quite explicit, leaving little room for differences of interpretation. Second, we observed no MI \times Experimental Condition interactions on manipulation checks of perceived discrimination against the ingroup in either Study 2 or Study 3, as this alternative explanation would imply.

Endorsing MI also may provide a sense of optimism and personal control that are psychologically advantageous for members of both devalued and valued groups. In their survey of Americans' beliefs about inequality, Kleugel and Smith (1986) found that people who attributed their economic outcomes to internal causes were happier than were those who attributed them to external causes, regardless of their income level. A sense of personal control over one's outcomes has been repeatedly linked to positive well-being, even when the belief in control is illusory (Langer, 1975; Taylor & Brown, 1988). Optimism also is positively related to self-esteem and psychological well-being (Taylor & Brown, 1988).

According to our worldview verification theory, a positive worldview is psychologically beneficial until it is directly disconfirmed. Endorsing MI is negatively related to self-esteem among members of low-status groups who perceive their group as a target of prejudice (Study 1) or who are exposed to blatant evidence that

their group is a target of prejudice (Studies 2 and 3; see also Foster et al., 2006; Foster & Tsarfati, 2005). These findings illustrate the predicament that members of socially devalued groups face. Buying into the dominant cultural ideology of meritocracy can provide an illusion of fairness and safety but can also be risky for those who are regularly exposed to blatant prejudice that cannot be ignored, denied, or reinterpreted. In such cases, one's worldview is in direct contradiction to one's reality. This may explain why in their study of the relationship between endorsing meritocratic beliefs and self-esteem among overweight women, Quinn and Crocker (1999) observed a negative relationship between PWE and self-esteem only among extremely overweight women and no relationship between PWE and self-esteem among moderately overweight women. The former are more likely than the latter to encounter blatantly prejudicial comments and overt discrimination.

Our worldview verification theory also implies that people are sometimes motivated to verify and defend worldviews that contest the prevailing social system. This contrasts with system-justification perspectives that assume the presence of a basic motive to justify the prevailing social system (Jost & Hunyady, 2002). Development of a system "delegitimizing" ideology may be an important strategy by which individuals who perceive their social identity to be widely devalued within a social system maintain their sense of self-worth. Individuals who repeatedly experience discrimination or witness it against others like themselves may come to view status in society as resulting more from bias, discrimination, and/or favoritism than from merit or effort. To the extent that this belief system is shared with other members of their group and provides meaning and value, it becomes an alternative cultural worldview (Greenberg et al., 1997). This cultural worldview may have costs, such as increased vigilance for discrimination (e.g., Kaiser, Vick, & Major, 2006; Major, Gramzow, et al., 2002). But this worldview may also buffer them from the adverse consequences of discrimination when it is encountered by lessening its sting (Sellers & Shelton, 2003) and by explaining social disadvantage in terms of discrimination rather than internal, stable causes (Crocker & Major, 1989). Being able to make meaning of negative life events lessens the extent to which they are experienced as distressing (Davis, Wortman, Lehman, & Silver, 2000; Taylor, 1983). Finally, when shared with others, cultural worldviews that challenge the status quo can be used to justify social change (Sidanius & Pratto, 1999; Tajfel & Turner, 1986).

Limitations and Directions for Future Research

The current research suggests multiple avenues for future research. First, we believe it is crucial to determine the boundary conditions under which threats to or confirmations of status beliefs alter self-esteem. We do not think that self-esteem suffers or rises in response to the contradiction or confirmation of every belief. Rather, we theorize that self-esteem is altered when beliefs that provide personal meaning and value, that is, beliefs that are core aspects of one's worldview, are challenged or confirmed (Solomon et al., 1991). We also think it unlikely that individuals who reject a meritocracy worldview experience a boost to their self-esteem every time they encounter discrimination against their ingroup or that they experience a decline in self-esteem every time they read about a lack of bias against their ingroup. Research is needed to discover when they do and do not. In this regard, it is noteworthy

that similar patterns were observed in the current studies and in Foster's studies (Foster et al., 2006; Foster & Tsarfati, 2005), even though the former focused on perceptions of pervasive prejudice against the ingroup, and the latter focused on perceptions of personal discrimination.

Second, although we theorized that MI plays a causal role in the processes observed here, we measured individual differences in endorsement of a MI in the current research rather than manipulating it experimentally. This raises the question of whether MI leads to the effects observed or whether these effects are the result of some other covarying factor. Group identification might be one likely candidate because endorsement of MI correlates negatively with group identification among members of low-status groups (e.g., Levin et al., 1998; Major, Gramzow, et al., 2002). If group identification were the influential variable, however, we would expect to find an opposite pattern of results. Prior research has shown that the more highly identified women and Latinos are with their gender or their ethnic group, the lower their self-esteem when they are exposed to discrimination directed against their gender or their ethnic group (McCoy & Major, 2003). In contrast, in the current research, the more women and Latinos rejected meritocracy beliefs, the higher their self-esteem when they were exposed to discrimination against their gender or ethnic group.

Our claim that MI plays a causal role in producing the effects observed in the current research is bolstered by recent evidence from our lab. Operating on the assumption that most Americans are aware of a meritocracy worldview even if they do not personally endorse it, McCoy and Major (2007) examined the effects of activating an MI on system-justifying attributions and stereotyping. Participants in their first experiment were exposed to a subtle merit prime (vs. a neutral prime) by asking them to unscramble 20 sets of five words into four word sentences (e.g., Bargh, Chen, & Burrows, 1996). In the merit prime condition, these sentences unscrambled to make MI salient (e.g., *effort positive prosperity leads to*). In the neutral prime these sentences were unrelated to merit (e.g., *a computer time calculator saves*). Participants exposed to the merit prime subsequently endorsed the belief in individual mobility significantly more than those given the neutral prime, thus demonstrating that the prime was effective at activating aspects of a MI.

A second experiment examined the effects of this prime on women's and men's attributions for rejection by a member of the other gender. They hypothesized that a meritocracy prime (relative to a neutral prime) would increase the extent to which individuals explain rejection in ways that maintain the justice of the status system. As predicted, when primed with meritocracy (relative to a neutral prime), women (lower status group) who were rejected by a man (higher status group) engaged in system justification by blaming the rejection more on themselves than on discrimination. In contrast, men who were rejected by a woman engaged in system justification by blaming the rejection more on discrimination than on themselves. This attributional pattern replicates the attributions observed in a study in which merit beliefs were measured rather than manipulated (Major, Gramzow, et al., 2002). A third experiment examined the effects of the meritocracy prime (vs. neutral prime) on responses of women who read about pervasive discrimination against women versus a non-self-relevant group. Women who were primed with meritocracy and who read about prejudice against their group were less likely to perceive sexism and more

likely to stereotype women, men, and themselves in ways that justify men's high status compared with all other groups. Thus, these experiments demonstrated that activating meritocracy beliefs can cause people to engage in system-justifying responses.

Although these experiments demonstrated a causal role for meritocracy in system justification, they leave a number of questions unanswered. For example, these experiments did not examine how activated MI interacts with perceived discrimination to affect self-esteem or psychological well-being among socially devalued groups. More important, these studies compared only a meritocracy prime with a neutral prime. Consequently, they were not designed to test a key prediction of the worldview verification perspective that we articulate here. This is the prediction that the self-esteem of individuals who reject MI will be increased by information that their group encounters prejudice (because it confirms their worldview) and decreased by information that discrimination against their group is rare (because it violates their worldview). This requires a condition in which a "discrimination" status ideology or other nonmerit ideology is activated. Thus an important direction for future research is to examine the effects of activating system legitimizing and system delegitimizing ideologies on individuals' perceptions, justifications, and self-esteem in responses to learning that their group is or is not a target of prejudice.

Fourth, consistent with other theories that are concerned with worldview defense (e.g., just world theory, terror management theory), we assumed that people are concerned about maintaining and defending their view of their own world. Thus, we hypothesized that people who endorse a meritocratic view of America are threatened by evidence of prejudice against their own group within their own system—in this case, America. We did not examine how people react to information that their own group is a victim of discrimination within a different system or to information that other groups are victims of discrimination within their own system. These are important directions for future research.

Fifth, we focused here exclusively on how status beliefs moderate reactions to evidence of prejudice among members of low-status or socially devalued groups. Given that members of socially devalued groups are more likely to be targets of prejudice than are members of high-status groups, we believe that this is the most ecologically valid type of group to focus on when studying reactions to prejudice. Nonetheless, we believe that examining how worldview influences responses to being a target of prejudice among members of high-status groups is an important direction for future research. On the basis of our past research, worldview may interact with group status to predict very different responses to prejudice against the ingroup (Major, Gramzow, et al., 2002).

Sixth, we believe it is important to examine how status beliefs interact with perceptions of prejudice to affect other types of psychological and behavioral responses. Although personal self-esteem and ingroup blame are important psychological variables with broad behavioral implications, status beliefs are likely to be an important predictor of many other types of responses to prejudice, such as motivation to engage in collective action for social change or to invest one's efforts in self-improvement (see Foster et al., in press).

Finally, we believe that exploration of the psychological implications of endorsing the merit principle versus a meritocracy worldview is a fruitful avenue for future research. A meritocracy

worldview is *descriptive*—it describes a person's beliefs about the way the world works. In contrast, the merit principle is *prescriptive*—it prescribes that an individual's relative outcomes (e.g., pay) should be allocated in proportion to his or her relative inputs. Thus it is possible for a person to endorse the merit principle as the way status should be determined in society but to reject meritocracy as an accurate and realistic description of how status is determined in society (see Davey, Bobocel, Son Hing, & Zanna, 1999). Indeed, in a separate sample of 195 European American undergraduate students, we found only a modest correlation (.14) between our 8-item measure of MI and the Preference for Merit Principle (PMP) scale. Davey et al. (1999) found a correlation of only .04 between BJW and scores on the PMP. In general, people who express a strong preference for the merit principle are less favorable to affirmative action because they see it as violating merit. However, if they can be convinced that discrimination exists (i.e., if they can be convinced to reject a meritocracy worldview, at least temporarily) they become more favorable toward affirmative action (Son Hing, Bobocel, & Zanna, 2002).

Conclusions

The present research addresses an issue of long-standing interest to social psychologists—the relation between society's evaluation of one's social identity and one's own evaluation of oneself. Results demonstrate that the impact of perceived discrimination against one's social group on self-esteem varies as a function of the target's beliefs about the basis of status differences in society. Believing in a merit-based system in which anyone can get ahead on the basis of talent and hard work is a double-edged sword for members of socially devalued groups. It enables them to appraise their world in less threatening ways, but it increases their vulnerability when they encounter evidence that their worldview is false. Rejecting a meritocracy worldview, however, also carries costs as well as benefits. It may lessen the sting when discrimination is encountered, but it may also lead to disengagement from domains in which effort really does pay off or to distrust when trust is warranted.

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