

# Low-Status Compensation: A Theory for Understanding the Role of Status in Cultures of Honor

P. J. Henry

DePaul University and University of Bielefeld

The mechanisms that link herding regions to cultures of honor have never been empirically tested. The objective of the present article is to show the important role that issues of status play in linking herding regions to cultures of honor using the theory of low-status compensation (P. J. Henry, 2008b) as a framework. Four studies are presented. Study 1 replicates the finding that counties in the American South conducive to herding have higher murder rates than do counties conducive to farming but shows those differences are mediated by indicators of status disparities in a county. Study 2 replicates the findings of Study 1 with an international sample of 92 countries. Study 3 tests the theoretical idea that people who are low in socioeconomic status face stigma in society and show self-defensive strategies generally. Finally, Study 4 provides experimental evidence that low-status tendencies toward aggressing in the face of insults may be due to strategies to protect their sense of social worth. The results are contextualized within the theory of low-status compensation as a theory for understanding the role status plays in predicting some forms of violence.

*Keywords:* low-status compensation, culture of honor, status, aggression, stigma

In an effort to understand the many causes of violence in our society and around the world, social scientists have examined the cultural origins of aggression. One area of research has identified cultures of honor, or cultures whose members are more likely to respond violently to threats to their honor. The major proponents of this idea in psychology have identified the origins of cultures of honor in societies with a history of herding (vs. farming) lifestyles (Nisbett, 1993; Nisbett & Cohen, 1996), called here the *herding hypothesis*. Although this research program has provided evidence concerning the mechanisms that link members of cultures of honor to aggressive responses (e.g., Cohen, Nisbett, Bowdle, & Schwarz, 1996), the speculations concerning the link between herding regions and cultures of honor have never been empirically tested. The proposal put forth here is that this link between herding regions and cultures of honor involves the mediating role of status. This *status-mediation hypothesis* is derived from the theory of low-status compensation (Henry, 2008b) and is related to psycho-

logical theories about social hierarchies and their influence on the ways low-status individuals protect their sense of social worth. The status-mediation hypothesis may provide a theoretically useful mechanism concerning why members of herding cultures may engage in violent behavior.

## The Theory of Low-Status Compensation and Its Relationship to Violence

The focus here concerns the relationship between aspects of a culture and violence through the lens of low-status compensation theory. The basic tenets of the theory that are relevant to violence are summarized briefly as follows: Certain cultures have substantial inequalities such that several groups are lower in status on differing dimensions, such as social class, income, education, race, ethnicity, or age. These status disparities threaten the sense of social worth of those who belong to the lower status groups. This threat to their worth must be managed or compensated for in some fashion, including the vigilant defense of their existing sense of worth. Of most relevance here, this vigilant defense of the self is linked to a greater likelihood for members of lower status groups to be violent against those who threaten that worth.

To follow the logic that links herding to violence through the mechanisms of group-based status requires an integration of several literatures from multidisciplinary approaches that, up to now, have developed independently. Figure 1 provides a framework for understanding these disparate literatures and how low-status compensation theory integrates them.

### *Literature #1: Herding and Cultures of Honor*

The original culture of honor research postulated that cultures of honor, where people may be especially prone to react violently in the face of insults, originated in regions of the United States and indeed

---

This article was written with the support of a research fellowship from the Alexander von Humboldt Foundation at the Institut für interdisziplinäre Konflikt und Gewaltforschung, the University of Bielefeld, Germany. Appreciation is extended to Katie Suleta for assisting with Study 1 and for creating Figure 2, Jim Davis for assisting with the study design and data collection for Study 4, and Kathy Ong for assisting with the literature review. Thanks also to David Sherman, Betsy Paluck, Felicia Pratto, Rowell Huesmann, Steve Messner, Jochim Hippler, Helmut Thome, Beate Küpper, Christine Reyna, Jim Davis, Mark Brandt, Sarah Butler, Kevin McLemore, the members of the Laboratory for Social Science Research at DePaul University, and the members of the 2008 Zentrum für interdisziplinäre Forschung research group on Control of Violence at the University of Bielefeld, for feedback on earlier versions of this article.

Correspondence concerning this article should be addressed to P. J. Henry, Department of Psychology, DePaul University, 2219 North Kenmore Avenue, Chicago, IL 60614. E-mail: phenry1@depaul.edu

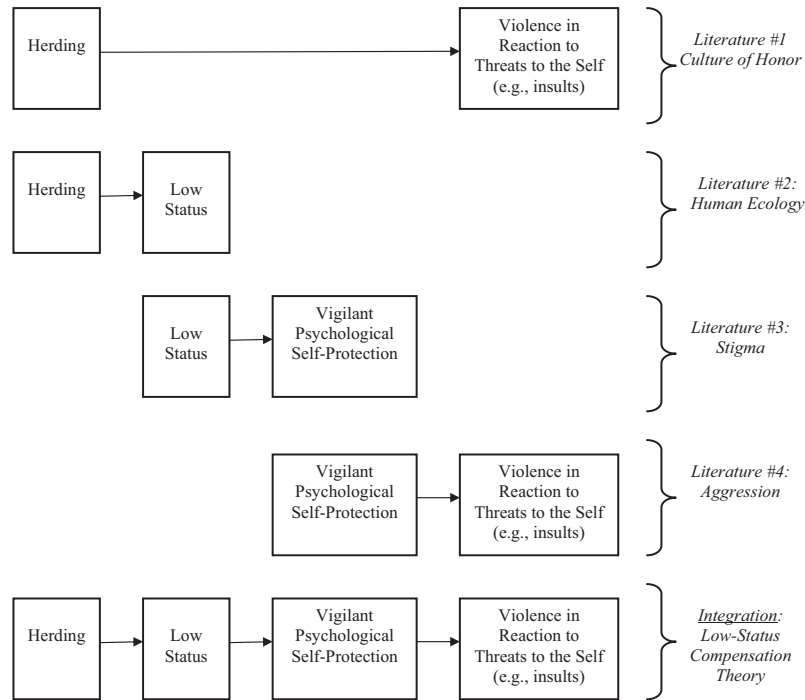


Figure 1. The integration of theories relevant to herding, status, defense of the self, and violence.

the world where herding seems to predominate. The evidence provided for this herding hypothesis comes from identifying that rural counties in the American South<sup>1</sup> with a dry climate or hilly terrain (conducive to herding) have higher murder rates than do counties in the South with moist climates and flat terrain (conducive to farming), even when controlling for other potential influencers of aggression (Nisbett, 1993; Nisbett & Cohen, 1996).

Why would there be a connection between herding cultures and cultures of honor? The protective aspects of a herding culture, of vigilantly ensuring herds are safe from harm, is thought to work its way into overall self-protection strategies that characterize southern culture and continue today even in the absence of such direct, active, protective herding practices. As noted in one of the original publications (Nisbett & Cohen, 1996, p. 5),

we believe that herding societies have cultures of honor for reasons having to do with the economic precariousness of herdsman. Herdsman constantly face the possibility of the loss of their entire wealth—through loss of their herds. Thus, a stance of aggressiveness and willingness to kill or commit mayhem is useful in announcing their determination to protect their animals at all costs.

This theoretical proposition is compelling but has never been empirically tested. Data demonstrating this link between herding and general self-protection heretofore have not been available. Additionally, the theoretical speculations of previous research propose that the self-defensiveness of herders stems from the protection of resources. The perspective of low-status compensation theory is that self-protective strategies importantly also protect the psychological self, not just the economic self. The purpose of the present series of studies is to examine closely the self-protective links between herding and cultures where people may be especially prone to respond violently in the face of insults.

### Literature #2: Herding and Status Disparities

In unfolding why herding cultures may be associated with cultures of honor, a second literature suggests that herding locations may coincide with locations of larger status disparities. Not all herders are poor, and indeed some individual herders can accumulate considerable wealth and power, but herding lifestyles nevertheless may lead to large status disparities in a society (Bradburd, 1990; Fratkin & Roth, 1990; Galaty & Bonte, 1992). In Africa, for example, herders face not simply the threat of losing their herds but more broadly the threat of being the more impoverished class in society (Rass, 2006). Herding may be accompanied not only by greater poverty but more importantly by social stigma. For example, evidence from Kenya and Uganda suggests that mainstream society there views “pastoralism as a fundamentally flawed way of life” (Krätli, 2001, p. 3).

The precise reasons for the connection between herding practices and greater status disparities are not definitively clear, but a number of explanations have been forwarded. These have included the ease with which drought and disease can destroy herds; the difficulty of maintaining a self-sustaining ecology with a commodity (animals) that consumes too many resources (plants); the governmental usurping of arid lands for urban development, game parks, the military, and agricultural use; and mismanagement of government interventions targeting herders in some parts of the world, among a host of other potential causes (see Fratkin, 1997,

<sup>1</sup> The American South is used throughout this article to refer to the states included in the U.S. Census divisions of South Atlantic (including Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia but not the District of Columbia) and East South Central (including Alabama, Kentucky, Mississippi, and Tennessee).

for a review). No single theoretical explanation for the relationship between herding practices and status seems to stand out, and indeed many proposed sources of status disparities in herding cultures are issues of controversy in the anthropology and human ecology literature (see, e.g., Fratkin, 2005; Salzman, 2004). Nevertheless, the connection between herding and status seems to be well established.

Because of the status disparities that exist in herding societies, a large proportion of members of those societies risk the psychological threat of being stigmatized due to their low socioeconomic status. Although a variety of other social groups—including racial minorities, immigrants, women, and gays and lesbians—are known to suffer stigma, socioeconomic status is studied less in the stigma literature as a psychologically stigmatizing condition. Nevertheless, low socioeconomic status is expected to be related to a stigmatizing condition, given that one's economic standing is often seen by the broader society as controllable. Survey research has shown that the impoverished are viewed by others as responsible for their condition (Kluegel & Smith, 1986), an attribution that is known to have damaging negative social and emotional consequences for targets of such attributions (Weiner, Perry, & Magnusson, 1988). Part of the current series of studies is designed to demonstrate that socioeconomic status is a real stigmatizing condition with predictable self-defensive properties.

### *Literature #3: Low-Status Vigilance Toward Self-Protection and Repair*

The stigma literature provides the next link in the chain, connecting the relationship between low group-based status and vigilance toward self-protection. There is an assumption that those who are members of lower status groups face long-term threats to the self that are based on being a member of that group, an assumption forwarded by some of the earliest stigma theorists (e.g., Goffman, 1963) and shared by stigma researchers today (Crocker & Major, 1989; Major, Quinton, & McCoy, 2002).

Such long-term threats to the self need to be managed in some fashion, and the idea of the necessity for protecting the self in the face of threats has had a long history in psychology. Early clinical and personality psychologists theorized about compensations that take place for insufficiencies to the self, when self-actualization or personal growth processes are disrupted (Adler, 1917; Rogers, 1980) or when one faces an "existential vacuum" (Frankl, 1946/1984). Later social psychologists theorized that in the face of failures or threats to self-integrity, people will be motivated either to tackle a threat directly or to repair the self indirectly through, for example, self-affirmation (Sherman & Cohen, 2006; Steele, 1988). Not doing so can lead to negative emotional consequences for anyone (Higgins, 1987), but managing further threats to the self becomes a task of special importance for those who already are threatened (Harmon-Jones et al., 1997; Simon, Arndt, Greenberg, Pyszczynski, & Solomon, 1998), including perhaps members of lower status groups.

Research in the stigma literature shows that those who are members of lower status groups are vigilant to varying degrees about threats to the self that may come because of their low status. This research has included the study of rejection sensitivity (Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002), stigma consciousness (Pinel, 1999), and chronic attention to cues

that are self-threatening (Kaiser, Vick, & Major, 2006), among other individual differences. This research has focused mainly on individual differences *within* stigmatized groups, but there exists some limited evidence to show *between-group* differences, such that lower status individuals are particularly invested in defending themselves against threats to the self compared with higher status individuals. For example, Blacks show higher levels of race-related rejection sensitivity compared with higher-status Whites and Asians (Mendoza-Denton et al., 2002), and lower status ethnic minorities may have chronically higher levels of belonging uncertainty compared with higher status Whites (Walton & Cohen, 2007). These studies provide examples of the differences between high- and low-status group members concerning self-related constructs that entail a kind of special vigilance.

An important perspective of low-status compensation theory is that low status is a stigma that brings with it lower psychological worth and value. While it is true that stigma also often accompanies lower economic worth and, as in the studies presented here, is sometimes defined by it (i.e., those who have lower incomes in a society have more of a social stigma compared with those who have higher incomes), low-status compensation theory assumes that it is *psychological* worth that is being protected, not *economic* or financial worth. In other words, the compensation strategies used by members of low-status groups are used in the service of psychological self-protection, not as a means of gaining higher status, higher income, more resources, etc. Although members of low-status groups can and will use a variety of strategies to improve their social status or create greater equality in society, as suggested by the literature on social dominance theory (Sidanius & Pratto, 1999), realistic group conflict (Bobo & Hutchings, 1996; LeVine & Campbell, 1972), and collective action (Hornsey et al., 2006), low-status compensation theory investigates the parallel but separate use of compensation strategies for less rational and more psychologically protective means. This perspective is therefore consistent with the literature in the social sciences that demonstrates how many attitudes and behaviors are not in the service of rational choices or economic interests (see, e.g., Mansbridge, 1990; Strack & Deutsch, 2007).

### *Literature #4: Vigilance Toward Self-Protection and Violence*

The last literature covered here connects threats to the self generally with violence. One line of research suggests that people who have a defensive or unstable self-esteem may be especially prone to violence (Baumeister, Smart, & Boden, 1996), particularly when facing threats to the self (Bushman & Baumeister, 1998; Kernis, Grannemann, & Barclay, 1989). Other related research concerns violence as a response to threats of social exclusion or ostracism. Social exclusion invokes what has been called a negative "relational evaluation" (Leary, Twenge, & Quinlivan, 2006, p. 112), or messages that the excluded person is not worthy of a particular interpersonal relationship (Leary, 2001, 2005). Because relational evaluations are tied to self-esteem (Leary, 2005), social exclusion may be an important source of aggression along the lines of threats to the self or spurned honor. For example, the phenomenon of school shootings has important ties to social exclusion (Leary, Kowalski, Smith, & Phillips, 2003), particularly for those perpetrators who are actively seeking social inclusion but

are rejected (Newman, Fox, Harding, Mehta, & Roth, 2004). Indeed, the relationship between social exclusion and aggression is particularly high among those who have a defensive, unstable, or artificially inflated sense of self (as in narcissism; Twenge & Campbell, 2003).

Parallel research in sociology also has shown a relationship between disrespect and violence. Showing signs of disrespect toward a target is one means of threatening the target's sense of social worth, and it follows that acts of disrespect are responded to violently, as with gang violence (Horowitz & Schwartz, 1974), prison violence (Jenness, Maxson, Matsuda, & Sumner, 2007), and murder in general (Katz, 1988). Taken together, these different programs of research converge to tell a similar story: that many types of violence can be interpreted as some form of psychological self-protection.

### Integration of the Literatures Through the Lens of Low-Status Compensation

These four literatures, drawn from multiple disciplinary approaches, have the potential for revealing the mechanisms that connect herding cultures to cultures of honor where people respond with aggression in the face of insults. Each literature connects one link in the chain to another, but heretofore these literatures have not been integrated into a theoretical whole to reveal the role that status may play in mediating the relationship between herding cultures and cultures of honor. The theory of low-status compensation may be one fruitful avenue for integrating these programs of research.

According to low-status compensation theory (Henry, 2008b), members of low-status groups, often over the course of a lifetime, receive messages from their society that they have lower social worth. These messages are threatening to their self-concept. To manage such threats, members of low-status groups may resort to any number of compensation strategies, one of which involves the vigilant protection of the psychological self. Threats to the self, in the form of insults, disrespect, dishonor, etc., will be more likely to be dealt with violently among members of low-status groups compared with their higher status counterparts, who will have a more secure sense of social value and worth and will therefore have less reason to resort to such self-protective strategies. Tying all the literatures together, if herding cultures indeed are disproportionately fraught with status disparities, then it follows that within these cultures there will be a greater proportion of individuals who will be vigilantly protecting the psychological self and therefore responding violently in the face of threats (see Figure 1, bottom row).

#### *The Utility of Group-Based Status in Understanding Cultures of Honor*

Low-status compensation theory adds to the existing culture of honor literature by revealing the role that group-based status may play in determining cultures of honor. Status may be useful in the sequence of mechanisms partly because of its potential to explain cultures of honor in locations that cannot easily be traced to herding practices. For example, previous research points to the importance of honor and respect as an explanation of violence that happens in street gangs (Horowitz & Schwartz, 1974), in the inner

city (Anderson, 2008), and in prisons (Jenness et al., 2007). Yet it is difficult to conclude reasonably that such cultures of honor, located in nearly all major urban environments in the United States, are related to vestiges of herding in metropolitan areas or even to people whose ancestors migrated to cities from predominantly herding areas. It seems easier to more directly trace the roots of cultures of honor in those environments to status; after all, members of street gangs and prisons are disproportionately members of ethnic minorities (see, e.g., Sidanius & Pratto, 1999; Vigil, 2002) and are therefore lower in group-based status. The causal sequence in these cases, then, could begin with status without requiring a connection to herding.

Consequently, there may be utility in considering status as an important mechanism involved in cultures of honor. If this proposition is true, then how might status differences have emerged between the American North and the South (the focus of the original culture of honor research) that would lead to cultural differences in the importance of honor? There are two possibilities. First, a history of herding in the South—or the fact that the settlers of the South (e.g., those from Scotland and Ireland) had herding ancestors (Nisbett, 1993)—may have led to greater inequality in the South compared with the North, for whatever ecological reasons. Second, one could plausibly argue that the North overall is of higher status as a consequence of the Civil War, from which the North emerged victorious. Indeed, the defeat of the South is thought to have played a large role in the importance of honor in the South (Wyatt-Brown, 2001), possibly due to efforts there to reestablish dignity in the face of newfound lower status.

Whether lower status is due to herding or other causes, the result is the same: a culture of lower status people in the South. This claim is corroborated by clear social indicators that southerners have lower status compared with their northern counterparts, most especially revealed through stereotypes that characterize southerners as poor, uneducated, crass, “white trash,” etc. (Billings, Norman, & Ledford, 2000), all features associated with lower status. Furthermore, some social psychological research has successfully conceptualized participants from the South as members of a stigmatized or disadvantaged group (Jost, Pelham, Sheldon, & Sullivan, 2003). Regardless of the source of the low status, the point remains the same, that status may be a key proximal factor driving the effects of cultures of honor in the South.

Importantly, the analysis here concerns the mechanisms connecting herding cultures to cultures of honor. Nothing presented here challenges the established mechanisms that link those from cultures of honor to aggressive responding, such as the aggression-related cognitive and physiological responses that are especially likely among people from honor cultures when their honor is threatened (Cohen et al., 1996). Additionally, the perspective here is consistent with the idea that herding patterns can lead to cultures of honor (e.g., Nisbett, 1993)—but through the mediated mechanisms of low status.

#### The Present Studies

Four studies are presented to show how status helps explain the link between herding cultures and cultures of honor, with data derived from a range of sources from across the globe by using a mixture of methods including archival data, survey methodology, and experimentation. Although the studies use a wide diversity of

samples and methodologies, they are designed to provide converging, independent evidence of the important role that status may play in triggering some forms of violence and are consistent with calls to diversify the samples and data sources used in the study of psychological processes in the intergroup literature (Henry, 2008a).

Studies 1 and 2 show the link between herding and cultures of honor through the mediating mechanisms of status. They draw upon archival data of broad social patterns, consistent with previous psychological research with similar techniques in the study of cultural patterns of honor (e.g., Cohen, 1998; Nisbett, 1993) or cultural patterns more generally (e.g., Vandello & Cohen, 1999). Study 1 directly examines the herding hypothesis by replicating the results from the original culture of honor studies and shows that status disparities mediate the effects of herding geography in the rural American South. Study 2 replicates Study 1 with data from 92 counties and, as in Study 1, shows that indicators of status disparities mediate herding indicators in predicting murder rates.

Studies 3 and 4 go beyond the herding hypothesis to bring the analysis back to the psychological level by focusing on the mechanisms that link status to violence. Study 3 provides evidence that links people of lower socioeconomic status to more stigmatizing experiences, as well as more self-defensive social strategies generally. Finally, Study 4 provides experimental data to show that the proneness of lower status people to aggress in the face of insults may be driven by strategies to protect one's sense of worth. Taken together, the studies are designed to provide converging evidence for low-status compensation theory in understanding the key role that status may play in the formation of cultures of honor.

### Study 1

Study 1 was designed to examine the mechanisms involved in the herding hypothesis by using an updated version of the methods used in the original culture of honor research (Nisbett, 1993; Nisbett & Cohen, 1996). The objective here was to replicate the original findings and to show that status mediates the relationship between herding and murder rates in counties in the American South.

The original findings focused solely on murders as perpetrated by White adults in southern rural counties, and this procedure was followed for at least two reasons (Nisbett & Cohen, 1996, pp. 14–15): First, the study of Black-perpetrated murders is complicated by massive Black migration to urban environments, making it difficult to study what is essentially a rural phenomenon as given by the herding hypothesis. Second, given the relationship that exists between the percentage of non-Whites in a region and homicide rates, and given the overrepresentation of Blacks in the South, the true effects of herding patterns would be considerably underestimated. For these reasons, and to provide a fairer test of the herding hypotheses, the same procedure of analyzing White-perpetrated murders was used here.

The main variable of analysis, number of murders by county, was gathered in the original study from a public domain data set: the FBI Supplemental Homicide Report covering the period 1976 through 1983 (as cited in Nisbett, 1993). Additionally, the original study divided rural southern counties into herding versus farming counties on the basis of climate and geographic information. The

findings revealed that herding counties (dry or hilly) had a higher murder rate compared with farming counties (moist and flat) in the South (Nisbett, 1993; Nisbett & Cohen, 1996).

Study 1 here replicates these methods but adds a measure of status disparities in the Gini index, which measures the equality of income distribution in a given population (Gini, 1921). U.S. counties with higher scores on the Gini index have greater income inequality and therefore greater status disparities. The theory of low-status compensation would suggest that the existence of greater status disparities would lead to a greater proportion of stigmatized individuals who would be more likely to protect the self vigilantly, including through aggressive or violent means.

Because the Gini index used here is a ranking of income distribution within a county but Whites are typically the racial group at the higher end of this income distribution relative to Blacks, it was necessary to control for the percentage of Blacks living in each county when computing all effects for the Gini index. African Americans on average have far lower incomes in the United States than do their White counterparts (see, e.g., Sidanius & Pratto, 1999), and consequently the presence of African Americans would increase the inequality of income distribution in a county and therefore increase the Gini index in that county. Indeed, the data collected in this study revealed a relationship between the percentage of Blacks living in a county and the Gini index for that county; for southern rural counties,  $r(239) = .35, p < .001$ , and for all southern counties,  $r(949) = .38, p < .001$ . Consequently, the analyses involved the study of counties in the South that were predominantly White, that is, counties that had 90% or higher White, non-Hispanic populations, following other research that examined homicides from the context of cultures of honor (e.g., Nisbett, Polly, & Lang, 1995, as reported in Nisbett & Cohen, 1996).<sup>2</sup>

Finally, it was important to ensure that the Gini index captured status disparities and not other constructs of theoretical importance, most notably a region's overall lack of wealth and resources. The wealth of a county theoretically is independent of how that wealth is distributed. Also, there exists a relationship between a region's wealth and violent crime (Short, 1997), for theoretical reasons that go beyond low-status compensation theory, including lack of sociostructural support such as inadequate or ineffective law enforcement (Anderson, 2008) or even the economic frustrations that accompany living in a society with little wealth (e.g., Dollard, Doob, Miller, Mowrer, & Sears, 1939). Because low-status compensation theory is about status and not about government agency deficiencies or frustrations from inadequate resources in one's region, it was important to control for the overall wealth of a county. Consequently, a measure of the county's per capita

<sup>2</sup> Importantly, the original culture of honor research (Nisbett, 1993; Nisbett & Cohen, 1996) also reported effects from the Gini index, showing results that were not especially powerful for the Gini. However, those analyses controlled for a poverty index that overlapped considerably in content with the status disparities captured by the Gini coefficient. For example, the poverty index included percentage of people living below the poverty line, percentage of households on public assistance, percentage of people with less than 5 years' education, unemployment rate, etc. Because of the large overlap in content, the poverty index predictably wiped out the effects of the Gini coefficient. The data presented in Studies 1 and 2 provide a more pure measure of wealth that is theoretically orthogonal to status disparities.

wealth was also included and was expected to be inversely related to its murder rates. Nevertheless, the more salient experience of low status should come from within-county status disparities as represented by the Gini index, which was expected to be an important independent predictor in the analysis explaining murder rates in southern counties.

### Method

Replicating the original culture of honor research required following precisely the methods outlined in the original research (Nisbett, 1993; Nisbett & Cohen, 1996).<sup>3</sup> This procedure involved examining the predictors of White-perpetrated murders in rural counties in the following southern states: Alabama, Delaware, Florida, Georgia, Kentucky, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia. Counties were selected with a predominantly White, non-Hispanic population (90% or higher) to remove the influence of minority populations on the measure of status disparities in predicting White-perpetrated murders.

### Predictor Variables

The herding variable was created using the same methods as in the original culture of honor research, which identified dry or hilly counties as suitable for herding and flat and moist counties as suitable for farming. The same archival resources (Fenneman, 1928; National Atlas of the United States, 1970) and decision criteria were used here. A county was designated as dry or hilly if the average topographical grade of the county was 8 percent or more or if precipitation was less than 24 in. of rain per year. A county was designated a moist plain if the average topographical grade was less than 8 percent and the county received 24 in. or more of rain per year. Figure 2 shows the breakdown of the southern counties by this distinction, such that counties suitable for herding predictably follow the Appalachians, whereas counties suitable for farming are found more toward the low-lying coastal regions and the Mississippi River basin.

The status disparity measure was the Gini index, which has been calculated at the county level in the United States, with the most recent publicly available calculation dating to 1990 (Nielsen, 2002). The index represents a ratio of income shared by the wealthiest portion of society divided by the income shared by the poorest portion of society, and when multiplied by 100 the index ranges theoretically from 0 to 100. A score of 0 would indicate a county with no inequality, such that all households in that county earn the same income. A score of 100 would indicate a county with maximum inequality, such that only one household earns the entire county's wealth and the rest of the population earns zero wealth. Clearly these are extremes on the scale, and the actual Gini index in the sample ranged from the lowest income disparity of 26.7 (in Mannassas County, Virginia) to the highest income disparity of 56.1 (in Tunica, Mississippi). To put these end points into context, they are similar to the income inequality distributions of Finland (26.9) and Mexico (54.6), respectively. The average Gini index for the sample was  $M = 39.2$  ( $SD = 3.9$ ).<sup>4</sup>

To rule out the potential confound between overall wealth and inequality in their influence on murder rates in a county, an index of wealth was included that combined per capita income (in 1999),

median home income (in 2003), and median home price in a county (in 2000), gathered from the most recent data made available from the U.S. Census Bureau (n.d.). These items were scaled in to a county wealth variable with good reliability ( $\alpha = .96$ ).

### Outcome Variable

The key variable to be predicted was the per capita, White-perpetrated murder rate within each southern county, based on the sum of murders that occurred in each county between 1976 and 2002. These data were obtained from the same source as in the original research (Nisbett, 1993; Nisbett & Cohen, 1996) and were updated by including murder rates through 2002 (Fox, 2005).

### Results and Discussion

#### Intercorrelations Among Variables

Table 1 shows the intercorrelations among the variables, including the relationship between the White-perpetrated murder rate and the predictor variables. As shown in the top half of the table, the measures of status disparities and county wealth had a strong and significant zero-order relationship to the murder rate in rural counties in the American South. However, the herding variable did not have a statistically significant relationship with any of the other variables. Because of the low power of the test (the analysis of predominantly White rural counties in the South involved only 107 counties), the analyses were opened to include all counties in the South (rural and nonrural) with 90% or higher White, non-Hispanic populations, which more than doubled the sample size. This increased statistical power resulted in all correlations in the matrix having a significant relationship, as shown in the bottom half of Table 1.

Importantly, the relationship between the herding variable and the murder variable replicated the original culture of honor findings (Nisbett, 1993; Nisbett & Cohen, 1996) with this updated data set: When considering all predominantly White counties in the South, those that are dry and hilly had higher White-perpetrated murder rates across the years 1976–2002 (per 100,000 people:  $M = 100.7$ ;  $SD = 73.4$ ) than did those that were moist or flat plains ( $M = 49.7$ ,  $SD = 23.2$ ),  $F(1, 278) = 7.67$ ,  $p < .01$ . As predicted, the measure of status disparities was also substantially related to the herding variable, such that dry and hilly counties tended to have higher rates of unequal income distribution (Gini index:  $M = 39.5$ ,  $SD = 3.5$ ) compared with counties characterized by moist or flat plains ( $M = 36.8$ ,  $SD = 3.3$ ),  $F(1, 279) = 9.25$ ,  $p < .001$ .

#### Multiple Regressions and Mediation Tests Predicting Murder Rates

These zero-order relationships, however, became qualified after examining the relationships of the predictor variables to

<sup>3</sup> The methodology of the original culture of honor research program is described in detail in Reaves (1993).

<sup>4</sup> Interestingly, these same data may be used to corroborate the idea that the South overall has greater inequality than the rest of the United States. The Gini index for the South from these data was computed to be 39.2. When compared with the Gini index for the entire United States (in 1991) of 37.4, the difference was statistically significant, one-sample  $t(950) = 14.6$ ,  $p < .001$ .



Figure 2. Study 1: Distribution of hilly/dry (shaded) versus moist plains (not shaded) counties in the American South.

Table 1  
Study 1: Correlation Matrix

Variable	1	2	3	4
White rural southern counties only ( $n = 280$ )				
1. Murder rate	—			
2. Herding	.14	—		
3. Status disparity	.57***	.11	—	
4. County wealth	-.51***	-.09	-.62***	—
Total White southern counties ( $N = 280$ )				
1. Murder rate	—			
2. Herding	.16**	—		
3. Status disparity	.58***	.18**	—	
4. County wealth	-.52***	-.25***	-.64***	—

Note. A county was designated White if 90% or more of the population was White, non-Hispanic (see Nisbett & Cohen, 1996). The murder rate and herding variables are taken directly from the methodology cited in Nisbett (1993) and Nisbett & Cohen (1996), as explained in the text.

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

murder rates in stagewise multiple regression analyses, as shown in Table 2. Because the zero-order relationship between herding and murder rates was significant with only the larger sample, only the data in the lower half of the table are reported here. The first column shows the relationship between the herding variable and murder rates, which is the same as the zero-order correlation ( $\beta = .16, p < .001$ ).

The second column adds the effect of the status disparity measure, which had a strong, independent relationship with murder rates ( $\beta = .56, p < .001$ ). However, it reduced the measure of herding statistically to zero. Mediation statistical significance tests, using the Sobel test described in Baron and Kenny (1986), indicated the mediation effect was statistically significant (Sobel statistic = 2.94,  $p < .01$ ).

The third column adds the effect of the wealth of a county, which also independently predicted the county murder rates ( $\beta = -.25, p < .01$ ). Wealthier counties had lower murder rates, but the measure of status disparities continued to strongly and independently predict murder rates ( $\beta = .41, p < .01$ ).

These results were nearly identical when comparing rural counties only (top half of Table 2) with all the counties (bottom half of Table 2). Many of the betas did not change their magnitude across the samples, although they changed their statistical significance, given the increased power of studying a larger number of counties.

Overall, Study 1 directly replicates the findings from the original culture of honor research by showing a link between locations conducive to herding and murder rates in the American South. However, this relationship was significantly mediated by status disparities in those locations. For whatever ecological reasons, counties here that are suitable for herding are also associated with status disparities, through which their relationship to murder rates is explained. These results occurred independently of the overall wealth of the county, which helps to rule out other plausible explanations for the influence of status disparities such as lack of adequate law enforcement and frustration from living in an impoverished society. These influences can have their effects on murder rates but seem to do so independently of status disparities.

In sum, these findings are consistent with the status-mediation hypothesis concerning the origins of cultures of honor.

## Study 2

Study 2 was designed to replicate the findings from Study 1 on a broader scale. This study involved an archival analysis of data relevant to herding patterns, status disparities, and violence in 92 countries across the globe, with the same objective as Study 1: to investigate the possible mediating role that status disparities play in the relationship between locations suitable for herding and murder rates. These analyses were done by examining the Gini index of income inequality in a country (at the country level, the Gini index is an indication of the distribution of wealth across a nation's population), the percentage of land in a country that is available for farming and pasture, and murder rates. Additionally, the measure of a country's wealth was determined in the form of per capita gross national product. This variable was added to demonstrate that the wealth of a country is expected to influence rates of violence—but independently of status disparities.

## Method

### Predictor Variables

Data on herding practices were gathered based on the same criteria for herding established in the original culture of honor research program (Nisbett, 1993; Nisbett & Cohen, 1996), which considered geographical features of the land as a proxy for agriculture and herding practices. Here, too, information is based on land usage—specifically, how much land in each country is set aside for crops versus meadows and pastures. Information on agricultural land use across several countries was available through the Food and Agricul-

Table 2  
Study 1: Multiple Regressions, in Stages, Predicting Murder Rates in Predominantly White Counties in the American South

Variable	Stage 1	Stage 2	Stage 3
White rural southern counties only ( $n = 107$ )			
Predictor variables			
Herding	.14	.08	.08
Status disparity	—	.56***	.41***
County wealth	—	—	-.25**
Adjusted $R^2$	.011	.318	.351
$F$ statistic for $\Delta R^2$	2.18	48.16***	6.38*
Total White southern counties ( $N = 280$ )			
Predictor variables			
Herding	.16**	.08	.05
Status disparity	—	.56***	.41***
County wealth	—	—	-.25***
Adjusted $R^2$	.023	.330	.364
$F$ statistic for $\Delta R^2$	7.67**	128.50***	15.83***

Note. A county was designated White if 90% or more of the population was White, non-Hispanic (see Nisbett & Cohen, 1996). The murder rate and herding variables are taken directly from the methodology cited in Nisbett (1993) and Nisbett & Cohen (1996), as explained in the text. Entries for predictor variables are standardized beta coefficients.

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



ture Organization (FAO) of the United Nations (n.d.). Two variables taken from data reported in the year 2000 were chosen to represent land usage. The first, percentage of cropland, was derived by summing the acreage of arable land (land used for crops like rice or wheat, which are replanted each year) and permanent crops (land used for crops like oranges, cocoa, or coffee, which do not need to be replanted each year) in a country and dividing that sum by total land acreage in the country. This variable in this sample ranged from 65.8% (Moldova) to 0.1% (Iceland), with an average of 20.8% ( $SD = 15.5$ ). The second variable, percentage of pastureland, was calculated by dividing the acreage of the permanent meadows and pastures variable by the total land acreage. This variable has an advantage over that used in Study 1 and in previous culture of honor research in that it is a continuous measure rather than dichotomous. This variable in this sample ranged from 82.5% (Mongolia) to 0.1% (Finland), with an average of 24.2% ( $SD = 19.0$ ).

Finally, the measure of status disparity in a country was drawn from the Gini index, which was described in detail in Study 1. The Gini index data were drawn from Human Development Reports of the United Nations Development Programme (UNDP; Fukuda-Parr, 2004) and ranged in this sample from 70.7 (Namibia) to 24.4 (Hungary), with an average of 39.9 ( $SD = 10.4$ ).

*Outcome Variable*

The key variable to be predicted was the countries' murder rates, made available through the United Nations Office on Drugs and Crime (UNODC; n.d.), which annually reports the number of murders per 100,000 population in a given country. The data from the UNODC have been defended as valid and useful by sociologists and criminologists interested in cross-national patterns of violence (Antonaccio & Tittle, 2007; Neapolitan, 1997). For most countries in this analysis, data were available for 2004. Another third of the countries had data available from 2002 or 2000. Six countries (China, Jordan, India, Kazakhstan, Tajikistan, and Tanzania) required data from 1999 or 1997. The murder rate per 100,000 ranged from 62.7 (Colombia) to 0.1 (Pakistan in 2000), with an average of 6.9 ( $SD = 10.0$ ).

*Countries Analyzed*

Data for all variables were available for 92 countries, which are listed in alphabetical order as follows: Albania, Algeria, Argentina, Armenia, Australia, Austria, Azerbaijan, Belarus, Belgium, Bolivia, Bulgaria, Canada, Chile, China, Colombia, Costa Rica, Côte d'Ivoire, Croatia, Cyprus, Czech Republic, Denmark, Ecuador, El Salvador, Estonia, Finland, France, Georgia, Germany, Greece, Guatemala, Hungary, Iceland, India, Indonesia, Iran, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Korea (South), Kyrgyzstan, Latvia, Lithuania, Luxembourg, Macedonia (former Yugoslav Republic), Malaysia, Mauritius, Mexico, Moldova, Mongolia, Morocco, Namibia, Nepal, Netherlands, New Zealand, Norway, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, Swaziland, Sweden, Switzerland, Tajikistan, Tanzania, Thailand, Tunisia, Turkey, Turkmenistan, Uganda, Ukraine, United Kingdom, United States, Uruguay, Venezuela, Yemen, Zambia, and Zimbabwe.

*Results and Discussion*

*Intercorrelations Among Variables*

Table 3 shows the intercorrelations among the variables, including the relationship between country murder rate and the predictor variables. The results are strikingly similar to those from Study 1, despite the major change in the location and level of analysis from counties within the southern United States to countries worldwide. All relationships were in the predicted direction: Murder rates were significantly related to greater herding capacity,  $r(90) = .28, p < .01$ ; lower country wealth,  $r(90) = -.31, p < .01$ ; and greater status disparities,  $r(90) = .50, p < .001$ . Predictably, of the land-use variables, only the percentage of pasture variable, and not the percentage of farmland variable, revealed a significant correlation with murder rates, which is consistent with the herding hypothesis. Importantly for the status-mediation hypothesis, the herding variable was substantially related to status disparities,  $r(90) = .40, p < .001$ , such that countries with a geographical arrangement conducive to herding also tended to have higher rates of unequal income distribution.

*Multiple Regressions and Mediation Tests Predicting Murder Rates*

As with Study 1, the predictor variables were entered into a multiple regression analysis to determine their independent power in predicting murder rates across the globe and to demonstrate that status disparities mediate the relationship between herding patterns and murder rates. (The farming variable was not included because it was not statistically significant in its zero-order correlations.) The results, shown in Table 4, are again strikingly similar to those from Study 1. The first column shows the relationship between the herding variable and murder rates, which is the same as the zero-order correlation ( $\beta = .28, p < .01$ ).

The second column adds the effect of the status disparity measure. This measure had a strong, independent relationship with murder rates ( $\beta = .47, p < .001$ ), and as with Study 1, it reduced the measure of herding statistically to zero. The mediation effect was statistically significant (Sobel statistic = 3.00,  $p < .01$ ). The third column adds the effect of the wealth of the country, which did not independently predict country murder rates significantly. Although this result was not expected, it did not affect the conclusion that status disparities mediate the relationship between herding patterns and murder rates.

Overall, Study 2 replicated the herding effect from both Study 1 and the original culture of honor research program but this time on a global scale. As in Study 1, the relationship between geography

Table 3  
*Study 2: Correlation Matrix*

Variable	1	2	3	4	5
1. Murder rate	—				
2. Percentage of cropland	-.17	—			
3. Percentage of pasture	.28**	-.33**	—		
4. Status disparity	.50***	-.36***	.40***	—	
5. Country wealth	-.31**	.02	-.16	-.46***	—

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

Table 4  
Study 2: Multiple Regressions, in Stages, Predicting Murder Rates Across 92 Countries

Variable	Stage 1	Stage 2	Stage 3
Predictor variable			
Percentage of pasture	.28**	.09	.09
Status disparity	—	.47***	.42***
Country wealth	—	—	-.09
Adjusted R <sup>2</sup>	.065	.242	.241
F statistic for ΔR <sup>2</sup>	7.34**	22.07***	0.84

Note. Entries for predictor variables are standardized beta coefficients. \*\*  $p < .01$ . \*\*\*  $p < .001$ .

conducive to herding and murder rates was statistically significant but was explained through the mediating effects of status disparities within a country. These findings are also consistent with the status-mediation hypothesis.

### Study 3

Studies 1 and 2 revealed the role that status disparities may play in linking herding cultures to cultures of honor. Although the Gini index used in these studies strongly suggests the influence of status disparities on murder rates, it operationalizes status at the societal level and so gives little information about what is occurring psychologically for individuals affected by the status disparities. Study 3 examines, at the individual and psychological level, if lower status individuals endure more stigmatizing experiences in their everyday life as well as show greater self-defensiveness broadly in their social interactions.

Study 3 involved survey data from a nationally representative sample of Americans showing the relationship between socioeconomic status, conceptualized through income, and various stigma-related outcomes, including (a) where they feel they stand on the social hierarchy, (b) frequency of negative and stigmatizing experiences, and (c) general self-defensive strategies in their social interactions. This study has two important advantages. First, it moves the measure of status from the abstract- and sociological-level indicator of the Gini index to an individual-level indicator that is closer to an individual’s psychology. Second, the study establishes that low socioeconomic status is associated with not just lack of resources but clear markers of psychological stigma and self-defensiveness, potential outcomes for people of low socioeconomic status that have been given little attention in the stigma literature.

#### Conceptualizing Status at the Individual Versus Aggregate Level

Status in Study 3 was conceptualized with an individual-level analogue to the Gini index used in Studies 1 and 2, that of the participants’ reported income, which was expected to be negatively related to willingness to act aggressively. An important distinction needs to be made between income or wealth measured at the individual level (used here in Study 3 and later in Study 4) and wealth measured at the aggregate level (used in Studies 1 and 2). In the first two studies, aggregate-level wealth in a geographical region was not used as an indicator of status, because aggregate

wealth of a region tells you nothing about where individuals stand in the social structure of that region. Indeed, even wealthy countries like the United States can have substantial status disparities. Consequently the Gini index was used to capture the extent of status differences that would affect individuals living within that culture.

In Study 3, the level of analysis moves away from the aggregate to capture individual responses, and so the individuals’ income or wealth becomes relevant for assessing their relative social status, compared with that of others who have more or less income or wealth within that same region. Therefore, having a higher income would be an indicator that a person has a higher status within that region. The differences in the measures required to capture the construct of status across the four studies here demonstrate how the operationalization of a construct necessarily changes when considering its impact at different levels of analysis.

### Method

Data were examined from the 2004 General Social Survey (GSS; Davis, Smith, & Marsden, 2007), a biennial survey conducted by the National Opinion Research Center.

#### Participants

The 2004 GSS featured the responses of English-speaking participants across the United States. The total sample interviewed was 1,807 participants, with each participant responding to one of six versions of the interview. Some of the measures below were included in all six versions, and other measures were included in only three. Consequently,  $N$  varies for each analysis depending on how frequently the measures appeared across versions of the interview. The sample size for each relationship tested is indicated in the rightmost column of Table 5.

The median age of the respondents was 41 years (range: 18–86). The participants included 1,412 White and 249 Black respon-

Table 5  
Study 3: Relationships Between Socioeconomic Status (Income) and Variables Related to Stigma and Psychological Self-Defensiveness

Variable	Correlations with income <sup>a</sup>	Partial correlations with income <sup>b</sup>	$n^c$
Perceived social rank	.16	.15	713
Perceived negative experiences			
General life	-.21	-.21	1,429
Workplace	-.12	-.12	1,646
Psychological self-defensiveness			
People cannot be trusted	-.26	-.23	848
People take advantage	-.12	-.10	844

Note. Items are coded such that higher numbers indicate higher socioeconomic status, higher perceived social rank, more negative life experiences, and greater psychological self-defensiveness. All relationships are statistically significant at  $p < .004$ .

<sup>a</sup> Entries represent zero-order correlations between income and variables in the left column. <sup>b</sup> The shared variance of gender and race was removed. <sup>c</sup> Sample size for the partial correlations.

dents, as well as 146 who identified as Other. There were 892 women and 915 men.

### *Procedures and Measures*

Participants were interviewed in person, typically at their place of residence, using computer-assisted personal interviewing devices. The interviewers asked questions concerning the participants' attitudes about a variety of personal, social, and political topics. The median length of the interviews was 83 min. Only items relevant to the theoretical purposes here were considered for analysis.

**Status.** Status was determined by responses to the question concerning income. Participants were asked to indicate their family income, before taxes, by selecting from among 23 contiguous categories ranging from 1 = *under \$1,000* to 23 = *\$110,000 or over*. The median response was the \$50,000–\$59,999 range. Higher socioeconomic status was ascribed to those with higher incomes.

Three outcomes were predicted as indicators that people of low socioeconomic status are a stigmatized social group: People with lower incomes compared with those with higher incomes were expected to (1) recognize that they have a lower social rank; (2) endure more negative life experiences both generally and in the workplace; and (3) show self-defensive patterns in their social interactions, including trusting people less and believing that people are trying to take advantage of them.

Perceived social rank was measured by an item that assessed the participants' perception of their rank in society. Participants were told, "In our society there are groups which tend to be towards the top and groups which tend to be toward the bottom." They then were shown a 10-point scale where they indicated where they perceived they stood on the social scale. Responses were coded here such that 10 = *top* (indicating the highest social rank in society) and 1 = *bottom* (indicating the lowest).

Perceived negative experiences were captured with two scales, with the assumption that the stigmatized endure a greater frequency of negative experiences in life. The first scale, called General Life, measured agreement with three items: "I hardly ever expect things to go my way," "I rarely count on good things happening to me," and "Overall, I expect more good things to happen to me than bad" (reverse-coded). Items were scaled such that 4 = *strongly agree*, 3 = *agree*, 2 = *disagree*, and 1 = *strongly disagree*. These items were averaged ( $\alpha = .63$ ). The second scale, called Workplace, measured negative experiences that participants have faced at work by indicating the frequency with which the following occur: "People at work treat me in a manner that puts me down or address me in unprofessional terms, either publicly or privately," "People at work get in my personal space in an attempt to intimidate me," "People at work throw things, slam doors, or hit objects when they are upset with me," and "People at work shout or yell at me in a hostile manner." Items were coded such that 4 = *often*, 3 = *sometimes*, 2 = *rarely*, and 1 = *never*. These items were averaged ( $\alpha = .75$ ).

Finally, psychological self-defensiveness was captured with two separate items, with the expectation that those who are lower in status would show a greater sensitivity toward potential threats to the self. The first item—"Generally speaking, would you say that people can be trusted or that you can't be too careful in dealing with people?"—captured whether people can be trusted. The fol-

lowing response options were provided: 4 = *You almost always can't be too careful in dealing with people*, 3 = *You usually can't be too careful in dealing with people*, 2 = *People can usually be trusted*, and 1 = *People can almost always be trusted*. The second item—"How often do you think that people would try to take advantage of you if they got the chance, and how often would they try to be fair?"—captured whether people take advantage of the participant. The response options were coded as follows: 4 = *Try to take advantage almost all of the time*, 3 = *Try to take advantage most of the time*, 2 = *Try to be fair most of the time*, and 1 = *Try to be fair almost all of the time*. These items measuring psychological self-defensiveness were not scaled together due to their theoretical distinctiveness.

### *Results and Discussion*

The first data column of Table 5 shows the zero-order correlations between the measure of socioeconomic status and the predicted outcome variables. All relationships were statistically significant and in the predicted direction. Those who were lower in status perceived themselves to be lower in social class ( $r = .16$ ), stated they received more negative experiences in general life ( $r = -.21$ ) and the workplace ( $r = -.12$ ), and showed more signs of self-defensiveness by endorsing that people cannot be trusted ( $r = -.26$ ) and that people take advantage of them ( $r = -.12$ ).

These results were as predicted; however, low-status compensation theory would also predict that group-based status dimensions other than socioeconomic status, such as race and gender, would have similar patterns of results. That is, according to the theory, women and ethnic minorities also would be expected to acknowledge having lower social rank, endure more negative experiences in life and in the workplace, and show self-defensive patterns of trusting people less and believing people are trying to take advantage of them. Because race and gender are also related to income, such that ethnic minorities and women tend to have lower socioeconomic status, it was necessary to run the same analyses controlling for any potential effects of gender and race. These results are shown in the second data column of Table 5. Controlling for other status dimensions does not change the pattern or significance of the results.

Overall, the results support the idea that individuals of low socioeconomic status represent a stigmatized group that exists independently of other status dimensions such as race and gender. The findings that those who are lower in socioeconomic status feel they are of lower social rank, perceive more negative experiences in different domains in their life, and experience greater self-defensiveness in their social interactions are consistent with predicted outcomes for members of stigmatized social groups.

### *Study 4*

The theory of low-status compensation rests on the idea that low-status individuals will use a variety of compensation strategies as a means of self-protection against further threats to the self, with one compensation strategy being vigilant self-defense that leads to aggressive responses in the face of insults. To this point, it still has not been demonstrated that aggression in the face of threats like insults serves a psychological self-protective strategy for low-

status people. Study 4 was designed to create an experimental manipulation that demonstrates the self-protective function of the compensation strategies used by lower-status individuals.

Participants in the experimental condition were given an opportunity to establish their worth, whereas those in the control condition were not. It was expected that lower status people who are given the opportunity to establish their worth would be less likely to express an interest in aggression when insulted. Conversely, high-status people were not expected to be influenced by the manipulation, because, according to the theory of low-status compensation, high-status individuals are chronically reminded of their worth by virtue of their higher status.

### Method

#### Participants

Participants were DePaul University students who were recruited from several sections of introductory psychology courses and who received course credit for their participation. The median age of the participants was 19 years (range: 18–25). Because violent behavior is typically a male phenomenon (Buss & Shackelford, 1997; Eagly & Steffen, 1986) and to maintain consistency with other experimental research in the culture of honor tradition (Cohen et al., 1996), only men were studied, and the final sample size was 96 participants.

#### Procedure and Measures

All measures, including the experimental manipulation, were administered in an online survey format and appeared within a larger survey that contained measures unrelated to the current study.

The key measure of social status was income to maintain consistency with the previous studies. Participants' status was based on their estimate of their parents' income, which was chosen because college students typically are not financially independent and will therefore have a status based on their upbringing in their parents' household. Participants responded to "What do you estimate your parents' combined yearly income to be?" with a choice of 12 options ranging from 1 = *less than \$20,000* to 12 = *greater than \$200,000*. The options were scaled in increments of \$10,000 (e.g., \$20,000–\$29,000, \$30,000–\$39,000) up to \$99,000, beyond which the scaling changed to increments of \$50,000. The median response was 8 = \$80,000–\$89,000.

The key measure relevant to the culture of honor was a scale of self-reported proneness to aggress when insulted. This measure has two important advantages. First, it moves the measure of aggression from extreme yet relatively rare cases of murder shown in Studies 1 and 2 to broader, everyday acts of violence that people are more likely to experience. Second, the measure considers aggression that is clearly tied to insults and therefore direct threats to the self, a feature critical to linking status to cultures of honor. In this way the measure is related to previous research showing the relationship between insult and aggressive responses particularly for those who come from cultures of honor such as southern White men, who were more likely to show physiological, cognitive, and behavioral antecedents of aggression when insulted (Cohen et al., 1996). The items in the scale were measured on a 6-point scale with response options anchored at 1 = *very strongly disagree* and 6 = *very strongly agree*. The first item

read, "If someone insults me, it may happen that I beat him up." The second read, "My honor is worth defending, even aggressively." The third read, "If someone insults or disrespects me, they will pay."<sup>5</sup> These items scaled with good reliability ( $\alpha = .85$ ). The sample averaged 3.4 on the scale, with responses ranging along the full spectrum of the scale.

Before receiving the self-report aggression measure, however, participants were randomly assigned to a between-subjects experimental condition that allowed them to establish their worth, versus a control condition. In the worth condition, participants followed these instructions:

*Try to recall a situation where something happened that made you to feel really important and valuable. This may be because of something that you did or said, or something someone else did or said to you. Please take as much time as you need to remember a situation like this. Try to recall yourself in that position. Try to imagine exactly what happened. Take as much time as you need. When you have the situation clearly in mind, we need you to briefly describe the situation you are thinking of, and more importantly, explain why it made you feel important or valuable.*

Participants provided open-ended descriptions. In the control condition, instead of writing about a personal experience that made them feel valuable, participants provided definitions for neutral words, including *flat*, *chair*, *neutral*, and *bird*.

### Results and Discussion

The data were analyzed by examining the Income  $\times$  Worth Manipulation interaction in predicting the expressed proneness to aggress when insulted or disrespected. The income measure was centered following the procedures of Aiken and West (1991) and multiplied by the dichotomous variable of the worth manipulation. The results are shown in Figure 3 and reveal a statistically significant interaction ( $p < .05$ ). This interaction pattern did not change even when controlling for participant race. The equation for the graph is given by the following:  $y = b_0 + b_1X + b_2Z + b_3XZ$ , such that  $y = 3.354 + -.097X + -.258Z + .142XZ$ , where  $X$  is the centered income variable and  $Z$  is the worth manipulation (0 = control condition, 1 = worth condition).

The region of statistical significance is the point on the interaction where the difference between experimental conditions is statistically significant (at  $p < .05$ , as computed following Preacher, Curran, & Bauer, 2006). This point in the data set corresponded to about one-half standard deviation below the mean and became wider with decreasing income. At one standard deviation below the mean on income, the worth manipulation is statistically significant at  $p = .023$ . At one standard deviation above the mean on income, the worth manipulation is not statistically significant ( $p = .557$ ). The difference in the worth manipulation is statistically significant only below the mean on income and at no point approaches significance above the mean on income.

In sum, lower status participants were less likely to show signs consistent with a culture of honor when they were given the

<sup>5</sup> This third item does not explicitly mention aggressive impulses, and it is possible that respondents do not intend aggression by "they will pay." However, the item scaled well with the other two, and the pattern and significance of results do not change when the item is removed from the scale.

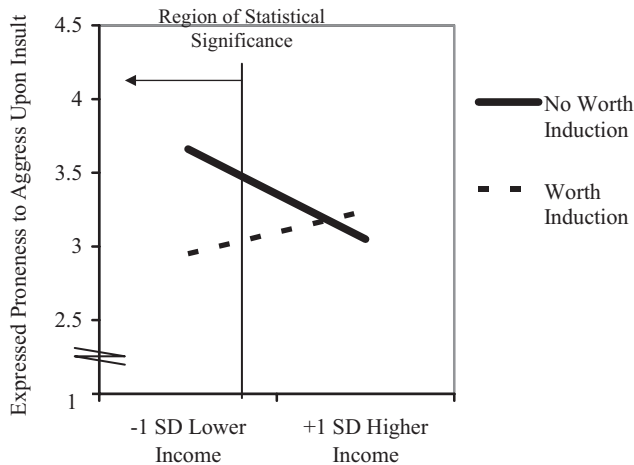


Figure 3. Study 4: Interaction effects of status and worth manipulation on expressed proneness to aggression upon being insulted. Region of statistical significance indicates the location on the income scale where the worth manipulation becomes statistically significant, at  $p < .05$ , as calculated from Preacher, Curran, and Bauer (2006). The pattern and significance of the interaction does not change when controlling for participant race.

opportunity to remind themselves of their worth. Higher status participants were unaffected by the manipulation. This pattern is consistent with low-status compensation theory insofar as low-status individuals will be less likely to aggress if their sense of worth has been protected.

### General Discussion

The culture of honor research in the psychology literature represents one of the most important lines of research for understanding cultural influences on destructive behaviors like violence and murder. The perspective of the present article is consistent with the idea that cultures of honor exist and can lead to important differences in aggressive and even violent behavior. The findings presented here are consistent with the idea that the American South has higher murder rates compared with those in the North (Nisbett & Cohen, 1996) and that southerners are more likely to show aggressive patterns of behavior when insulted (Cohen et al., 1996).

What this article investigates more closely is the mechanisms behind cultures of honor. The original theory postulated that such cultures emerge from geographical regions where herding predominates. The evidence here reveals data that are consistent with this herding hypothesis but proposes that the mechanisms involved in transforming herding cultures into cultures of honor can be found through the mediating influence of status. The purpose of the present article was to provide a theoretically and empirically driven model that was based on low-status compensation theory (Henry, 2008b).

Four studies, drawing from diverse data sources and methodologies, were presented to provide data supporting the theory of low-status compensation and especially its mediating role in explaining the relationship between herding practices and cultures of honor. Study 1 directly replicated data from the classic culture of honor research by showing that White-perpetrated murders in the rural American South are more likely to occur in counties that are dry or hilly (e.g.,

conducive to herding) but showed that the herding–murder relationship is mediated by an indicator of status disparities. Study 2 broadened the level of analysis from counties in the American South to countries across the globe. Like Study 1, Study 2 provided evidence that the herding effect on murder rates is mediated by status disparities in a country. Study 3 brought the analysis down to the level of the individual and focused on the relationship between status and experiences of stigma and general self-protectiveness by examining data from a nationally representative sample of American citizens. The results showed that those who were lower in status recognized that they had lower social rank, endured more stigmatizing experiences, and maintained more self-defensiveness in their social interactions. Finally, Study 4 tapped into the psychological self-protective function of aggressing in the face of insults: When lower status participants were given the opportunity to validate their worth, they were less likely to endorse lashing out aggressively when insulted or disrespected. Higher status participants were unaffected by the manipulation.

### Further Questions Concerning Herding, Status, and Cultures of Honor

The explanatory power of herding on murder rates shown in Studies 1 and 2 was mediated by indicators of status, which leads to these important questions: Why is there a relationship between lands suited for herding and status disparities in those lands? Is this a finding generalizable to all herding regions? These questions about economics and geography rest at levels of analysis that go beyond the psychological, although some anthropology and human ecology research has addressed these associations (see Fratkin, 1997, for a review).

The relationship between herding and status disparities exists, but why, then, would there be a relationship between status disparities and cultures of honor? Do status disparities experienced by individuals result in *cultures* of honor? The theory of low-status compensation, after all, is not specifically a theory about culture but a theory about individual psychology and behavior, and one might easily interpret the data presented here not as a consequence of cultural factors but as the sum of individual acts of aggression by low-status individuals compensating for their lower status.

However, this conclusion probably would not be appropriate given what is known about the transmission of culture. Even if cultures of honor were to emerge out of the compensation strategies of a collection of individuals, such patterns of attitudes and behavior could be imitated by others in the culture (see, e.g., Hurley & Chatter, 2004), and therefore cultural norms of honor could be transmitted even to high-status people in that society. It is through these imitative processes that large disparities in a culture could lead to cultures of honor for everyone in that culture, not just those who have lower status. Therefore, the presence of large status disparities in a society should not be interpreted, in and of itself, as a culture of honor but as an important contributor to the values, ideals, and norms that determine broader cultures of honor.<sup>6</sup>

<sup>6</sup> I thank Rowell Huesmann for offering this insight.

### *An Alternative Interpretation of the Status Effect: Relative Deprivation Theory*

The main purpose of the present series of studies was to establish status as a key player in understanding cultures of honor. The theory of low-status compensation (Henry, 2008b) was provided as one explanatory theory considering the mechanisms that link status to cultures of honor. The reasoning behind this approach was demonstrated through the integration of the literatures raised in the introduction that link low status (stigma) to self-protective strategies and link self-protective strategies to violence.

Nevertheless, there are other plausible mechanisms worth considering, most notably that of relative deprivation theory (Gurr, 1970; Walker & Smith, 2002). Relative deprivation heretofore has not been associated with cultures of honor but may play a role in light of the current findings, especially given the focus on status. Relative deprivation theory states that people who are lower in status have fewer resources (sometimes by definition) than do those who are higher in status. Consequently, such resource disparities will lead those with lower status to rebel or lash out against such unfairness, sometimes even violently. A culture of honor explanation therefore would not be necessary for explaining such low-status-perpetrated violence.

The findings from the first two studies presented here are not incompatible with this interpretation. Higher murder rates happen in the American South and across the globe in association with greater status disparities, and from these two studies alone it is difficult to interpret the precise mechanism driving murder. Such murders plausibly could be happening due to outrage against the system that is experienced by lower status group members (although cf. Jost, 2004).

The data from Study 4, however, are not so easily interpretable through relative deprivation theory. This study taps mechanisms that are directly related to issues of self-protection and cultures of honor, that is, reactions to insults. It is not clear how, at least directly, insults in this study are tied to resources. Indeed, it is difficult to imagine the economic advantages of aggressing when insulted, especially given the strong negative social and legal repercussions of violent behavior that hardly protect or enhance one's economic condition (e.g., fines, imprisonment, possible later retaliation by the victim's family or friends). A clearer explanation is provided by the existing aggression literature, which considers such violence as a defense of the psychological self (although heretofore this literature has not considered issues of status; Baumeister et al., 1996; Bushman & Baumeister, 1998). Study 4 confirmed the self-protective nature of aggression by giving low-status participants the opportunity to establish their psychological worth (i.e., not their monetary worth). When they did so, they significantly reduced their endorsement of aggressing in the face of insults. The influences of relative deprivation on aggression are not wholly discounted by these findings, but the evidence suggests that relative deprivation processes probably operate through a different route and probably by themselves cannot explain violence caused by low-status group members (see also Jost, 2004).

### *Prospects for Managing Violence*

Low-status compensation theory may provide an optimistic model for the prevention of violence. According to the theory,

ensuring members of low-status groups in conflict situations that their worth is not being threatened plausibly may help prevent some forms of violence. For example, one approach to defusing potential interpersonal violence from a member of a lower status group might involve reassuring the individual that his or her self is not being threatened, by showing signs of respect, worth, and dignity. Such simple reassurances may potentially stem violence before it happens.

The logic potentially may be extended to a broader level as well. Take, for example, the terrorist violence, which is (almost by definition) violence of a weaker or lower status group against a more powerful, higher status group. According to the theory of low-status compensation, the motivations for terrorist violence may be a function of collective threats to the self felt on the part of the terrorists. In the face of perceived insults and humiliation, lower status groups may resort to terrorism as a means of collective protection. However, if these group members were to be shown, collectively, signs of respect, recognition, and dignity, the integrity of the group might be protected, which might reduce the probability of violent reactions toward the source of threats to their worth. The issue of conveying respect as a means of establishing intergroup peace has been raised previously in the literature (for just a small sampling, see Andersen, Saribay, & Thorpe, 2008; Heitmeyer, 1992; Kelman, 2007). However, this issue has not yet been considered in terms of its particular importance for lower status social groups, and it remains an important area for further exploration.

In conclusion, there seems to be theoretical and practical utility in more closely examining the relationships between status, protection of the self, and patterns of certain forms of violence. The present studies represent an integration of previous independent literatures that have focused on relationships between herding and status (the human ecology literature), status and self-protection issues (the stigma literature), and self-protection and violence (the aggression literature). Such an integration of literatures may contribute to a better understanding of some of the mechanisms behind cultures of honor and may contribute toward more effective and realistic strategies for ameliorating some forms of violence.

### References

- Adler, A. (1917). *Study of organ inferiority and its psychological compensation* (S. E. Jelliffe, Trans.). Washington, DC: Nervous and Mental Disease.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.
- Andersen, S. M., Saribay, A., & Thorpe, J. S. (2008). Simple kindness can go a long way: Relationships, social identity, and engagement. *Social Psychology, 39*, 59–69.
- Anderson, E. (2008). *Code of the street: Decency, violence, and the moral life of the inner city*. New York: Norton.
- Antonaccio, O., & Tittle, C. R. (2007). A cross-national test of Bongger's theory of criminality and economic conditions. *Criminology, 45*, 925–958.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173–1182.
- Baumeister, R. F., Smart, L., & Boden, J. M. (1996). Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. *Psychological Review, 103*, 5–33.
- Billings, D. B., Norman, G., & Ledford, K. (Eds.). (2000). *Back talk from*

- Appalachia: Confronting stereotypes*. Lexington, KY: University of Kentucky Press.
- Bobo, L. D., & Hutchings, V. L. (1996). Perceptions of racial group competition: Extending Blumer's theory of group position to a multiracial social context. *American Sociological Review*, *61*, 951–972.
- Bradburd, D. (1990). *Ambiguous relations: Kin, class, and conflict among Komachi pastoralists*. Washington, DC: Smithsonian Press.
- Bushman, B. J., & Baumeister, R. F. (1998). Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: Does self-love or self-hate lead to violence? *Journal of Personality and Social Psychology*, *75*, 219–229.
- Buss, D. M., & Shackelford, T. K. (1997). Human aggression in evolutionary psychological perspective. *Clinical Psychology Review*, *17*, 605–619.
- Cohen, D. (1998). Culture, social organization, and patterns of violence. *Journal of Personality and Social Psychology*, *75*, 408–419.
- Cohen, D., Nisbett, R. E., Bowdle, B. F., & Schwarz, N. (1996). Insult, aggression, and the southern culture of honor: An "experimental ethnography." *Journal of Personality and Social Psychology*, *70*, 945–960.
- Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review*, *96*, 608–630.
- Davis, J. A., Smith, T. W., & Marsden, P. V. (2007). General social surveys, 1972–2006 [Computer file]. Ann Arbor, MI: Inter-university Consortium for Political and Social Research.
- Dollard, J., Doob, L. W., Miller, N. E., Mowrer, O. H., & Sears, R. R. (1939). *Frustration and aggression*. New Haven, CT: Yale University Press.
- Eagly, A. H., & Steffen, V. J. (1986). Gender and aggressive behavior: A meta-analytic review of the social psychological literature. *Psychological Bulletin*, *100*, 309–330.
- Fenneman, N. M. (1928). Physiographic divisions of the United States [Map at 1:7,000,000 and table, U.S. Geological Survey]. *Annals of the Association of American Geographers*, *18*.
- Food and Agriculture Organization of the United Nations. (n.d.). *FAOSTAT*. Retrieved March 20, 2008, from <http://faostat.fao.org/site/377/default.aspx>
- Fox, J. A. (2005). *Uniform crime reports [United States]: Supplemental homicide reports, 1976–2002* [Computer file.]. Ann Arbor, MI: Inter-university Consortium for Political and Social Research.
- Frankl, V. E. (1984). *Man's search for meaning* (Rev. ed.). New York: Washington Square Press. (Original work published in 1946.)
- Fratkin, E. (1997). Pastoralism: Governance and development issues. *Annual Review of Anthropology*, *26*, 235–261.
- Fratkin, E. (2005). Book review of *Pastoralists: Equality, Hierarchy, and the State*, by Philip Carl Salzman. *American Anthropologist*, *107*, 307–308.
- Fratkin, E., & Roth, E. A. (1990). Drought and economic differentiation among Ariaal pastoralists in Kenya. *Human Ecology*, *18*, 385–402.
- Fukuda-Parr, S. (2004). *Human development report 2004: Cultural liberty in today's diverse world*. Retrieved March 20, 2008, from the United Nations Development Programme Web site: <http://hdr.undp.org/en/reports>
- Galaty, J. G., & Bonte, P. (1992). *Herdsmen, warriors, and traders: Pastoralism in Africa*. Boulder, CO: Westview Press.
- Gini, C. (1921). Measurement of inequality and incomes. *The Economic Journal*, *31*, 124–126.
- Goffman, E. (1963). *Stigma*. Englewood Cliffs, NJ: Prentice-Hall.
- Gurr, T. R. (1970). *Why men rebel*. Princeton, NJ: Princeton University Press.
- Harmon-Jones, E., Simon, L., Greenberg, J., Pyszczynski, T., Solomon, S., & McGregor, H. (1997). Terror management theory and self-esteem: Evidence that increased self-esteem reduced mortality salience effects. *Journal of Personality and Social Psychology*, *72*, 24–36.
- Heitmeyer, W. (1992). Desintegration und gewalt [Disintegration and violence]. *Deutsche Jugend*, *40*, 109–122.
- Henry, P. J. (2008a). College sophomores in the laboratory redux: Influences of a narrow data base on social psychology's view of the nature of prejudice. *Psychological Inquiry*, *19*, 49–71.
- Henry, P. J. (2008b, September). *Low-status compensation: A theory for understanding the roots and trajectory of violence*. Paper presented at the Final Conference: Control of Violence, Center for Interdisciplinary Research, Bielefeld, Germany.
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, *94*, 319–340.
- Hornsey, M. J., Blackwood, L., Louis, W., Fielding, K., Mavor, K., Morton, T., et al. (2006). Why do people engage in collective action? Revisiting the role of perceived effectiveness. *Journal of Applied Social Psychology*, *36*, 1701–1722.
- Horowitz, R., & Schwartz, G. (1974). Honor, normative ambiguity and gang violence. *American Sociological Review*, *39*, 238–251.
- Hurley, S., & Chatter, N. (Eds.). (2004). *Perspectives on imitation: From cognitive neuroscience to social science*. Cambridge, MA: MIT Press.
- Jenness, V., Maxson, C. L., Matsuda, K. N., & Sumner, J. N. (2007). *Violence in California correctional facilities: An empirical investigation of sexual assault*. Report submitted to the California Department of Corrections and Rehabilitation, Sacramento.
- Jost, J. T. (2004). Book review of *Relative deprivation: Specification, development, and integration*, edited by Iain Walker and Heather Smith. *Political Psychology*, *25*, 668–674.
- Jost, J. T., Pelham, B. W., Sheldon, O., & Sullivan, B. N. (2003). Social inequality and the reduction of ideological dissonance on behalf of the system: Evidence of enhanced system justification among the disadvantaged. *European Journal of Social Psychology*, *33*, 13–36.
- Kaiser, C. R., Vick, S. B., & Major, B. (2006). Prejudice expectations moderate preconscious attention to cues that are threatening to social identity. *Psychological Science*, *17*, 332–338.
- Katz, J. (1988). *Seductions of crime: Moral and sensual attractions of doing evil*. New York: Basic Books.
- Kelman, H. C. (2007). The Israeli-Palestinian peace process and its vicissitudes: Insights from attitude theory. *American Psychologist*, *62*, 287–303.
- Kernis, M. H., Grannemann, B. D., & Barclay, L. C. (1989). Stability and level of self-esteem as predictors of anger arousal and hostility. *Journal of Personality and Social Psychology*, *56*, 1013–1022.
- Cluegel, J. R., & Smith, E. R. (1986). *Beliefs about inequality*. New York: Aldine De Gruyter.
- Krätli, S. (2001). *Educating nomadic herders out of poverty? Culture, education and pastoral livelihood in Turkana and Karamoja*. Sussex, United Kingdom: University of Sussex Institute of Development Studies.
- Leary, M. R. (2001). *Interpersonal rejection*. New York: Oxford University Press.
- Leary, M. R. (2005). Sociometer theory and the pursuit of relational value: Getting to the root of self-esteem. *European Review of Social Psychology*, *16*, 75–111.
- Leary, M. R., Kowalski, R. M., Smith, L., & Phillips, S. (2003). Teasing, rejection, and violence: Case studies of the school shootings. *Aggressive Behavior*, *29*, 202–214.
- Leary, M. R., Twenge, J. M., & Quinlivan, E. (2006). Interpersonal rejection as a determinant of anger and aggression. *Personality and Social Psychology Review*, *10*, 111–132.
- LeVine, R. A., & Campbell, D. T. (1972). *Ethnocentrism: Theories of conflict, ethnic attitudes, and group behavior*. New York: Wiley.
- Major, B., Quinton, W. J., & McCoy, S. K. (2002). Antecedents and consequences of perceiving the self as a target of discrimination: Theoretical and empirical advances. In M. P. Zanna (Ed.), *Advances in*

- experimental social psychology* (Vol. 34, pp. 251–330). New York: Academic Press.
- Mansbridge, J. J. (Ed.). (1990). *Beyond self-interest*. Chicago: University of Chicago Press.
- Mendoza-Denton, R., Downey, G., Purdie, V. J., Davis, A., & Pietrzak, J. (2002). Sensitivity to status-based rejection: Implications for African American students' college experience. *Journal of Personality and Social Psychology*, 83, 896–918.
- National Atlas of the United States. (1970). Mean annual precipitation [Adapted from a 1:10,000,000-scale map by Environmental Data Service, Environmental Science Service Administration, for the period 1931–1960]. Washington, DC: U.S. Department of the Interior.
- Neapolitan, J. L. (1997). *Cross-national crime: A research review and sourcebook*. Westport, CT: Greenwood Press.
- Newman, K. S., Fox, C., Harding, D., Mehta, J., & Roth, W. (2004). *Rampage: The social roots of school shootings*. New York: Basic Books.
- Nielsen, F. (2002). Income inequality in U.S. counties (Gini coefficients). Retrieved May 1, 2008, from [http://www.unc.edu/\\_nielsen/data/data.htm](http://www.unc.edu/_nielsen/data/data.htm)
- Nisbett, R. E. (1993). Violence and U.S. regional culture. *American Psychologist*, 48, 441–449.
- Nisbett, R. E., & Cohen, D. (1996). *Culture of honor: The psychology of violence in the South*. Boulder, CO: Westview Press.
- Nisbett, R. E., Polly, G., & Lang, S. (1995). Homicide and U.S. regional culture. In B. R. Ruback and N. A. Weiner (Eds.), *Interpersonal violent behaviors: Social and cultural aspects* (pp. 135–151). New York: Springer.
- Pinel, E. C. (1999). Stigma consciousness: The psychological legacy of social stereotypes. *Journal of Personality and Social Psychology*, 76, 114–128.
- Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interactions in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics*, 31, 437–448.
- Rass, N. (2006). *Policies and strategies to address the vulnerability of pastoralists in sub-Saharan Africa* (PPLPI Working Paper No. 37). Rome: Food and Agriculture Organization of the United Nations. Available at <http://www.fao.org/ag/againfo/projects/en/pplpi/publications.html>
- Reaves, A. L. (1993). *The cultural ecology of rural White homicide in the southern United States*. Unpublished doctoral dissertation, University of Michigan.
- Rogers, C. R. (1980). *A way of being*. Boston: Houghton Mifflin.
- Salzman, P. C. (2004). *Pastoralists: Equality, hierarchy, and the state*. Boulder, CO: Westview Press.
- Sherman, D. K., & Cohen, G. L. (2006). The psychology of self-defense: Self-affirmation theory. *Advances in Experimental Social Psychology*, 38, 183–242.
- Short, J. F., Jr. (1997). *Poverty, ethnicity, and violent crime*. Boulder, CO: Westview Press.
- Sidanius, J., & Pratto, F. (1999). *Social dominance: An intergroup theory of social hierarchy and oppression*. New York: Cambridge University Press.
- Simon, L., Arndt, J., Greenberg, J., Pyszczynski, T., & Solomon, S. (1998). Terror management and meaning: Evidence that the opportunity to defend the worldview in response to mortality salience increases the meaningfulness of life in the mildly depressed. *Journal of Personality*, 66, 359–382.
- Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the integrity of the self. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 21, pp. 261–302). New York: Academic Press.
- Strack, F., & Deutsch, R. (2007). The role of impulse in social behavior. In A. W. Kruglanski & E. T. Higgins (Eds.), *Social psychology: Handbook of basic principles* (2nd ed., pp. 408–431). New York: Guilford Press.
- Twenge, J. M., & Campbell, W. K. (2003). "Isn't it fun to get the respect that we're going to deserve?" Narcissism, social rejection, and aggression. *Personality and Social Psychology Bulletin*, 29, 261–272.
- United Nations Office on Drugs and Crime. (n.d.). *United Nations surveys on crime trends and the operations of criminal justice systems*. Retrieved March 21, 2008, from <http://www.unodc.org/unodc/en/data-and-analysis/United-Nations-Surveys-on-Crime-Trends-and-the-Operations-of-Criminal-Justice-Systems.html>
- U.S. Census Bureau. (n.d.). *State and county quickfacts*. Retrieved January 17, 2007, from <http://quickfacts.census.gov/qfd/index.html>
- Vandello, J. A., & Cohen, D. (1999). Patterns of individualism and collectivism across the United States. *Journal of Personality and Social Psychology*, 77, 279–292.
- Vigil, J. D. (2002). *A rainbow of gangs: Street cultures in the mega-city*. Austin, TX: University of Texas Press.
- Walker, I., & Smith, H. (Eds.). (2002). *Relative deprivation: Specification, development, and integration*. Cambridge, England: Cambridge University Press.
- Walton, G. M., & Cohen, G. L. (2007). A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology*, 92, 82–96.
- Weiner, B., Perry, R. P., & Magnusson, J. (1988). An attributional analysis of reactions to stigmas. *Journal of Personality and Social Psychology*, 55, 738–748.
- Wyatt-Brown, B. (2001). *The shaping of southern culture: Honor, grace, and war, 1760s–1890s*. Chapel Hill: University of North Carolina Press.

Received May 27, 2008

Revision received January 29, 2009

Accepted January 29, 2009 ■