Empirical Research Paper

Beyond the Dichotomy: Creation and Validation of a Continuous Statewide Index of U.S. Honor Culture

Personality and Social Psychology Bulletin
1–15

DOI: 10.1177/01461672241255494
journals.sagepub.com/home/pspb
Sage

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Abstract

Honor cultures are characterized by a heightened sensitivity to reputation threats and strong expectations for the defense of honor. U.S. states vary in the extent to which they express the cultural norms of honor, but researchers have frequently relied upon a dichotomous classification that differentiates states as honor or dignity states. We created and validated a continuous, six-item index of honor norms and values across all U.S. states (Study 1). In Study 2, our honor index was correlated with historical variables theoretically associated with the genesis of honor cultures. In Study 3, we validated our honor index further by showing that it predicted several race-/ethnicity-specific outcomes that prior research has connected with honor (e.g., homicide rates, suicide rates). This new index equips researchers with a more nuanced understanding of U.S. honor cultures and a measure that can be used in future investigations.

Keywords

culture of honor, U.S. index, culture

Received November 7, 2023; revision accepted April 29, 2024

More than 25 years ago, Cohen and Nisbett published a series of groundbreaking studies describing the powerful role of honor in certain parts of the United States (Cohen, 1998; Cohen et al., 1996; Nisbett & Cohen, 1996). Most of this early research focused on the role of honor in insult-related aggression among adult males, but since then, researchers have discovered how honor-related beliefs and values can predict a wide range of outcomes, including depression and suicide (Bock et al., 2023; Osterman & Brown, 2011) and excessive risk-taking (Barnes, Brown, & Tamborski, 2012). These insights into the cultural dynamics of honor have almost exclusively relied on Cohen's (1998) dichotomous classification of U.S. states as being either *honor states* (i.e., southern or western states) or *dignity states* (i.e., northern or midwestern states, plus Alaska and Hawaii).

Despite its usefulness, this dichotomous classification does not allow for nuance and variation in degrees of statewide honor-orientation. For instance, in this classification, both Oregon and Alabama constitute honor states. However, we suspect that Oregon and Alabama are not equivalent in honor-orientation. Given this limitation, we sought to create a *continuous* measure of the U.S. culture of honor that assesses variation in the honor-orientation of U.S. states. In line with previous work creating indices of different cultural dimensions across U.S. states (Harrington & Gelfand, 2014; Vandello & Cohen, 1999), we created a continuous statewide index from unique indicators representative of honor.

Theoretical Foundations of Cultures of Honor

In honor cultures, a person's social worth is dependent on reputation (Pitt-Rivers, 1966). The resulting concern for one's reputation shapes the norms, values, and beliefs broadly representative of honor-focused cultural contexts. Nisbett and Cohen (1996) pointed to the cultural norms of early Scots-Irish settlers in the 18th and 19th centuries as key to understanding the geography of honor in the U.S. South and West. These settlers brought a tradition of open-range herding from a borderland region between the Scottish Lowlands and Northern England, which was characterized by extensive poverty and fragile social and legal institutions

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needed to resolve conflicts and punish offenders (Brown & Osterman, 2012; Fischer, 1989). Success in such precarious environments depended on men building reputations for strength, ingroup loyalty, and the willingness to do whatever necessary to defend their interests.

These factors led to a set of codes that continue to influence the norms and values in honor-oriented regions today (Brown, 2016). Men in honor cultures are expected to be tough, loyal, and brave, and to respond aggressively to disrespect (Brown & Osterman, 2012; Nisbett, 1993; Nisbett & Cohen, 1996). If a man feels that he (or his family) has been disrespected or threatened, honor norms dictate that he should exact revenge using physical violence. Women in honor cultures are expected to be modest and sexually chaste, and to have unwavering loyalty to their spouse and family (Rodriguez Mosquera, 2016; Vandello & Cohen, 2003). Because families rely on each other for survival, the disreputable behavior of one family member stains their family's honor. Therefore, all family members are responsible for upholding and protecting the family's honor (Rodriguez Mosquera, 2016).

In the United States, a culture of honor contrasts with a culture of dignity that is thought to characterize most upper midwestern and northeastern states. Dignity cultures arose in contexts with stable means of subsistence (e.g., farming) and adequate legal systems. These regions of the United States were largely settled by English Puritans, Quakers, Dutch, and German farmers in the 18th and 19th centuries, who shared norms and values of cooperation, education, and social organization (Fischer, 1989; Nisbett & Cohen, 1996). These values nurtured ideas that people are born with intrinsic value (i.e., not earned or conferred by others, so it cannot be taken away; Ayers, 1984; Leung & Cohen, 2011). In a dignity culture, people are expected to be guided by their internal sense of morals and values, rather than by fear of the public shaming that can follow transgressions in cultures of honor (Leung & Cohen, 2011). Because self-worth is relatively immutable in a dignity culture, people in such cultures are not compelled to retaliate whenever they feel insulted. People in dignity cultures are aware of their reputation, but this awareness is not as central in their everyday lives as in honor cultures, and its defense does not demand violent retaliation.[1]

Primary Cultural Indicators of Honor

The distinction between honor and dignity states in the United States has led to substantial research demonstrating the usefulness of these cultural logics for understanding both the behavior of individuals and state-level policies and practices. Informed by this work, we discuss primary indicators of U.S. honor culture suggested by previous research.

Guns and Self-Defense

Much of the initial research using the dichotomous classification examined state-level outcomes related to self-protection. Because of the high value placed on people's ability to defend themselves, their property, and their families in honor cultures, Cohen and Nisbett (1994) reasoned that firearm ownership is a contemporary expression of this ability and, thus, is likely to be higher in honor-oriented regions of the United States. Indeed, honor states have fewer restrictive gun laws than dignity states do while also having more laws protecting individuals' rights to defend their property (i.e., "stand your ground" laws; Cohen, 1996). Likewise, honor states also have higher firearm ownership rates compared with dignity states (Bock et al., 2023; Brown, Imura, & Osterman, 2014; Cohen & Nisbett, 1994).

Retributive Violence

Norms of retributive violence are key to understanding cultures of honor. The reciprocity norms that govern honor cultures (i.e., returning good for good, bad for bad), coupled with the importance placed on individuals' possessing means of self-defense, promote norms of retaliatory violence when a person is involved in an argument or brawl. For instance, at the state level, argument-related—but not felony-related—homicide rates among White males[2] are higher in honor states than in dignity states (Cohen, 1998; Nisbett, 1993).

These honor-related norms of retributive violence also influence state-level policies and practices related to legal punishment of wrongdoers. Cohen (1996) discovered that, compared with dignity states, honor states were more likely to have laws allowing capital punishment and to sentence a person convicted of homicide to death. Perhaps more importantly, research indicates that honor states are also more likely to actually execute those given a death sentence compared with dignity states (Brown et al., 2018; Cohen, 1996).

Beyond supporting violent punishment of individual transgressors, individuals in honor cultures also support the U.S. military's use of violent action for national defense (Barnes, Brown, & Osterman, 2012; Barnes et al., 2014; Saucier et al., 2018). For instance, people from an honor state are more supportive of using lethal retaliation against the perpetrators of 9/11 than are people from a dignity state (Barnes, Brown, & Osterman, 2012). Similarly, legislators from honor states tend to be more "hawkish," favoring the use of military force in international disputes (Cohen, 1998). In short, people who adhere to honor-oriented values also endorse stronger military responses to national threats and act on that endorsement when in decision-making roles.

Enlisting in the armed forces might serve as one way for individuals who personalize national threats to participate in retributive violence as well to acquire personal and family honor (Nawata, 2020). Honor states not only have higher U.S. Army enlistment rates than dignity states (Brown, Carvallo, & Imura, 2014), but military veterans also disproportionately live in honor states relative to dignity states (Bock et al., 2023). In sum, it appears that people from honor contexts have participated in the military as a way to respond to national threats and to bring honor to themselves and their families.

Gender Attitudes and the Family

The cultural scripts that lead to aggressive reputational defense also affect gender relations and legal inequalities. For instance, Cohen (1996) noted that compared with dignity states, honor states scored lower on an index that measured gender disparities across legal (e.g., equal pay laws), political (e.g., percent of mayors who are women relative to men), and economic domains (e.g., median income of women workers relative to men; Baron & Straus, 1989); they also were less likely to have mandatory arrest laws for perpetrators of domestic violence. Likewise, Brown and colleagues (2018) found higher domestic homicide rates perpetrated by White males in honor states compared with dignity states. The lax punishment of domestic violence alongside higher rates of domestic homicide suggests that domestic violence is tolerated, to some extent, in honor states. A man whose partner has behaved in a way that has damaged his honor (such as dressing provocatively, flirting with other men, or engaging in infidelity) may threaten and/or use physical violence against her to keep her "in line"; failing to do so violates the core tenet of masculine honor that men should be intolerant of disrespect (Vandello & Cohen, 2003). Likewise, a woman may stay with an abusive spouse so that she does not violate the core tenet of feminine honor focused on family and marital loyalty. Supporting this reasoning, members of honor cultures tend to be more accepting of women who stay in abusive relationships compared with members of dignity cultures (Vandello & Cohen, 2003; Vandello et al., 2009). These examples, among many more, capture the patriarchal norms and attitudes embedded in cultures of honor, whereby men should be tough and intolerant of disrespect, and women should be sexually chaste and loyal to their families, especially their husbands.

As the previous examples illustrate, honor is embedded into the family system, creating a core interdependency among family members. One example of such an interdependency involves naming patterns that highlight the importance of reputation for honor-oriented people. Brown, Carvallo, and Imura (2014) found that people from honor states were more likely to use patronyms (i.e., father's or another patriarch's name) when naming newborn sons compared with people from dignity states. However, there were no statewide differences in the use of matronyms (i.e., mother's or another matriarch's name for newborn daughters), suggesting that honor cultures tend to intergenerationally confer reputation through a patrilineal social system.

In sum, the cultural construct of honor highlights various reputation-focused social dynamics, including (but not limited to) the need to retaliate when a person's reputation is threatened. These state-level findings point to the relevance of the state as a meaningful unit of analysis for examining a wide variety of outcomes that correspond with honor norms and values.

Creating a Continuous Measure of Honor

To date, most of the state-level honor research in the United States has used Cohen's (1998) dichotomous classification, which relied on Census Bureau divisions to classify states in the South and West as honor-oriented[3] and states in the North and Midwest as dignity-oriented. Although this has been a useful tool for researchers, sufficient data are available now to create a more nuanced, continuous measure that captures statewide variability in honor norms. As Cohen (1996) stated, the "'North,' 'South,' and 'West' are not monolithic entities, and they have tremendous economic, ethnic, and historical diversity within them" (p. 964). A well-validated, continuous measure of state-level honor-orientation would permit scholars to assess in new ways the degree to which honor cultures have shaped individual and institutional attitudes, practices, and policies.

As an alternative to the dichotomous classification, some researchers have used Gastil's (1971) southernness index—a continuous statewide measure—which ranks U.S. states based on demographic and economic characteristics of the South. It has been used to understand regional differences in honor-related outcomes, such as homicide rates (Nisbett, 1993; Nisbett & Cohen, 1996), accidental death rates (Barnes, Brown, & Tamborski, 2012), and individual differences in endorsement of honor norms (Barnes, Brown, & Osterman, 2012). Despite demonstrating some utility in predicting honor-related outcomes, this measure has been criticized for having poor measurement and conceptual properties (see Loftin & Hill, 1974), not the least of which is a lack of clarity on the exact source of its statewide scores.

Two recent studies created a continuous index of honor cultures, but there are several conceptual shortcomings of these measures (Brown, Carvallo, & Imura, 2014; Lin et al., 2022). Most notably, these recent indices included variables as *indicators* of honor cultures that would be better conceptualized as *outcome* variables. For instance, Brown, Carvallo, and Imura (2014) included statewide White suicide rates in their index, and Lin and colleagues (2022) included argument-related homicide rates for White males in their index. Suicide and argument-related homicide rates are best viewed as *consequences* of honor norms; they are outcomes that researchers typically wish to predict using a cultural lens. We sought to remedy these shortcomings by including variables that serve as conceptual indicators of honor cultures without drawing from the wealth of variables that previous research has examined as outcomes of honor-related dynamics.

Our honor index supplements past research that created state-level indices of important cultural dimensions, such as cultural tightness–looseness (Harrington & Gelfand, 2014) and individualism-collectivism (Vandello & Cohen, 1999). In line with these prior cultural indices, we sought to create a continuous index of U.S. honor cultures that can be used to

rank U.S. states' honor-orientation and to predict an array of honor-related outcomes.

The Present Studies

In Study 1, we created an index from a set of six distinct, state-level variables theoretically linked to honor dynamics. In Study 2, we validated our index by testing its associations with a set of theoretical antecedents of U.S. honor culture. Finally, in Study 3, we further validated our measure by examining the extent to which it predicted several honor-related outcomes. Although any social group might endorse honor-related beliefs and values, previous research has demonstrated that such beliefs and values are only *geographically* dispersed in the United States among White Americans (e.g., Brown, 2016; Nisbet & Cohen, 1996). Thus, in line with prior culture of honor theory and evidence, we tested whether our honor index predicts theoretically related statewide outcomes among White men (and sometimes women), in contrast to outcomes among non-Whites.

Importantly, we compared the predictive validity of our new continuous index to that of the dichotomous classification of honor (Cohen, 1998). We preregistered our selection of variables, hypotheses, and analytical plans for all three studies (see pre-registration at https://osf.io/jvgdm). We did not determine ideal sample sizes via power analyses because we were limited to the 50 U.S. states for our state-level analyses. In addition, we were mindful of maintaining as many degrees of freedom as possible to preserve the statistical power of our tests. We aimed to select covariates that were highly relevant to honor and our outcomes, as well as those that are frequently used in the culture of honor literature. All our code, data, and detailed results are available online (Supplemental Materials, https://osf.io/tn5dj/). Data were analyzed using R v3.0.0 and SPSS v28. Detailed results for all findings described below can be found in the Supplemental Materials.

Study 1: Creating the Honor Index

In line with previous research (Harrington & Gelfand, 2014; Vandello & Cohen, 1999), we created a composite index of the culture of honor using archival data. First, we sought to create an honor index that covered a restricted time period, such that data for the indicators in the index came from a period of time *before* the outcomes of interest. We chose 2001 as the cutoff for our indicator variables, so that data from the years 2002–2021 could be used to compute our outcome variables. Second, we sought to create an index that broadly captured key elements of honor cultures: the importance of self-defense (and national defense), retributive justice at the institutional level, and honor-based norms associated with gender and the family. We were careful to select indicators for which there was sufficient data from each state to compute reliable estimates. Third, we excluded variables that could be considered antecedents to (e.g., percentage of Scots-Irish in each state) or outcomes of honor cultures (e.g., argument-related homicide).

Method

In creating a state-level honor index, we chose variables that we (a) expected to be nonredundant, (b) demonstrated high reliability in their computation, and (c) incorporated attitudes, behaviors, and laws/policies at the state level that exemplified the cultural values of honor. Given these criteria, we chose the following variables.

Military Enlistment. Enlisting in the military facilitates the earning of honor, as the military represents bravery and loyalty (Cohen, 1998). We estimated statewide differences in military enlistment using data from the 2001 Center for Naval Analyses' (2001) "Population Representation in the Military Services" report. Data prior to 2001 are not publicly available. We examined active component enlistment of 18- to 24-year-olds with No Prior Service (NPS) based on combined estimates from the Air Force, Army, Marine Corps, and Navy. We calculated the percentage of each state's NPS enlistment contribution divided by the percentage of each state's 18- to 24-year-old civilian population to create a "representation ratio," which serves as a population-adjusted index of the military enlistment of each state. Values greater than 1 indicate that the NPS military enlistment for a given state was greater than that state's share of the entire country's 18- to 24-year-old civilian population, suggesting that a state is overrepresented in its military enlistment levels; values less than 1 indicate underrepresentation.

Number of Gun Laws. The ability to defend oneself, one's family, and one's property when wronged is paramount in honor cultures; thus, honor-oriented states should have fewer laws restricting gun ownership. We used Siegel and colleagues' (2017) database of restrictive gun laws in each state, which records whether a given state had any of 133 provisions spanning 14 aspects of firearm ownership (e.g., ammunition, storage, transfers) across a 26-year period. To be consistent with our other defense-related indices, we used statewide gun laws as of 2001.[4] We used a log10 transformation to normalize the distribution due to a strong degree of positive skew. We then reflected scores so that all our index variables were in the positive direction. Thus, higher values represent fewer gun laws.

Attitudes Toward Guns. People in honor states should be more likely to endorse the notion that there should be a gun in every home, as guns afford protection. Thus, we examined *attitudes* toward guns using a single-item survey question from the DDB Needham Life Style Survey (Putnam, 2000). The survey contained responses from over 67,000 U.S.

adults (54.8% female) polled between 1975 and 1998. Participants were 46.41 years old on average (SD = 15.91). Eighty-seven percent were White, 6% Black, 2% Latina/o, and 5% of the sample identified with other ethnic categories or failed to report their ethnic identity. Individuals indicated the extent to which they agree that "There should be a gun in every home," on a 1 (*definitely disagree*) to 6 (*definitely agree*) Likert-type scale.

Statewide Execution Rates. People in honor cultures support harsh punishments for wrongdoers, reflecting norms of retributive justice. Consistent with prior evidence that honor states have more laws allowing capital punishment and more executions (Cohen, 1996), we included execution rates in each state between 1930 and 2001 (Snell, 2010). We used a square-root transformation to normalize the distribution due to positive skew.

Patriarchal Attitudes. In cultures of honor, men are expected to be strong and dominant, and women are expected to be loyal, even to their detriment (Vandello & Cohen, 2003). We theorized that there might be between-state variation in the extent to which people hold such honor-consistent patriarchal attitudes. We examined these attitudes using four items from the same DDB Life Style survey described previously (Putnam, 2000; see above for demographic information). Participants indicated the extent to which they agreed that "Men are naturally better leaders than women," "Men are smarter than women," "A woman's place is in the home," and "The father should be the boss in the house," using a 1 (*definitely disagree*) to 6 (*definitely agree*) Likert-type scale. Responses to these four questions were averaged, and higher scores indicated a stronger endorsement of patriarchal attitudes (α = .88).

Legal Gender Equality. We reasoned that patriarchal attitudes would also be evident in state-level policies related to gender equality (Cohen, 1996). Because gender inequality is multifaceted and can manifest in several ways at the state level, we chose to use a composite index that includes diverse indicators of legal gender inequality. Baron and Straus (1989) created this 15-item index of legal gender equality that encompassed different ways that women are afforded legal rights compared with men. The index consists of laws on issues such as employment (e.g., presence of a fair employment practices act, equal pay laws), sex discrimination (e.g., in housing, education), domestic violence (e.g., statutes defining intimate partner violence as a criminal offense), and whether a state required a woman to change her name when she married (see Baron & Straus, 1989 for details). Scores on this index ranged from 0 to 100; we reverse coded the scores so that higher scores indicated greater legal gender *inequality*.

Patronyms. Honor may manifest in family dynamics through parents' naming practices, choosing patronyms for newborn sons but not matronyms for newborn daughters (Brown, Carvallo, & Imura, 2014). Brown, Carvallo, and Imura (2014) estimated patronym scores for each state by computing the prevalence of baby names that were high in popularity across three generations (i.e., babies born in 1960, 1984, and 2008; Social Security, 2023). However, because of our time-bound restriction on the computation of our index variables (e.g., 2001 and earlier), we were only able to estimate patronym scores for each state using data from two generations. Thus, our patronym estimations for each state were not identical to those used by Brown, Carvallo, and Imura (2014), but the concept was the same.

Results and Discussion

Creating the Honor Index. We conducted a parallel analysis with direct oblimin rotation with all seven variables to determine the number of factors to retain (see Supplemental Materials for description of handling missing data). A single-factor solution was optimal, with six of the indicators—excluding patronyms—loading onto the single latent factor.[5] We thus dropped patronyms from the set and retained the remaining six variables for our index. In preparation for factor analysis, we standardized all six indicators (see Table 1 for bivariate correlations). Based on the suggestions of the parallel analysis, we submitted the standardized indicators to an exploratory factor analysis using the unweighted least squares (ULS) procedure with direct oblimin rotation. The ULS procedure has been shown to recover factor structure better in circumstances where there is a small sample size (i.e., 50 U.S. states) and when few factors are to be retained (e.g., Jung, 2013; Jung et al., 2020). Consistent with suggestions from the parallel analysis, we extracted a single latent factor (eigenvalue = 3.50) that accounted for 58.39% of the sample variance. All indicators exhibited strong factor loadings, and the index had good internal consistency (α = .85; see Table 2 for detailed information). We used the regression method of constructing factor scores for each state, which represent scores for our new honor index.

We linearly transformed these honor index scores by multiplying each score by 20 and adding 50 to that product (Baron & Straus, 1989; Harrington & Gelfand, 2014; Vandello & Cohen, 1999). This transformation yields a more interpretable score for each state by making all scores positive (see Table 3 for honor index rankings and Figure 1 for a colorized map), with higher scores indicating greater honor-orientation. The three most honor-oriented states, according to this new index, are Alabama, Mississippi, and Wyoming, whereas the three least honor-oriented states are Rhode Island, Hawaii, and Massachusetts.

Scores on our continuous honor index were significantly higher in states designated as honor states in Cohen's dichotomous classification (n = 27; M = 63.16) than in dignity states (n = 23; M = 34.56, $p < .001$, d = 1.92). Comparisons of South, West, Northeast, and Midwest Census regions

Table 1. Bivariate Correlations Among Honor Indicators.

Indicators	1.	2.	3.	4.	5.	6.
1. Military Enlistment	—					
2. Number of Gun Laws	.53***	—				
3. Attitudes Toward Guns	.62***	.65***	—			
4. Number of Executions	.37**	.19	.59***	—		
5. Patriarchal Attitudes	.29*	.35*	.73***	.35**	—	
6. Legal Gender Inequality	.33*	.42**	.63***	.54***	.60***	—
7. Patronyms (Two-Gen)	.07	−.30*	.05	.47***	−.12	.21

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

Table 2. Factor Creation Details.

Indicators	Factor loadings	Corrected item-total correlations	Alpha if item deleted
1. Military Enlistment	0.584	.54	.85
2. Number of Gun Laws	0.630	.57	.84
3. Attitudes Toward Guns	1.006	.90	.78
4. Number of Executions	0.585	.54	.85
5. Patriarchal Attitudes	0.716	.64	.83
6. Legal Gender Inequality	0.700	.65	.83
			Total $\alpha = .85$

revealed the expected pattern of differences (see Supplemental Materials for detailed results).

In summary, we created a continuous honor index based on variables that represent the norms and values of U.S. honor cultures. Six of our hypothesized seven potential variables formed a reliable index. Results also indicated that the continuous honor index exhibited a pattern of regional differences consistent with previous conceptualizations of U.S. honor cultures, as many southern and western states were highly ranked in our index (21 of the 23 honor states in the dichotomous classification were above our index's midpoint). However, our index revealed nuances in state-level honor-orientation. For instance, Maryland is considered an honor state using the dichotomous classification *only* because it is technically a southern state, but it ranked 46th in our honor index. In addition, states that have historically been treated as dignity states, such as Vermont and North Dakota (ranked 18th and 19th, respectively), share some of the cultural values of highly honor-oriented states (e.g., fewer gun laws, more positive attitudes toward guns). These discrepancies highlight that other sociocultural dynamics—due either to historical immigration patterns of European settlers, or more contemporary dynamics associated with inter-regional migration or recent immigration patterns—outweigh simple geographical location and arbitrary Census boundaries.

Study 2: Ecological and Historical Correlates of the Honor Index

The U.S. culture of honor is theorized to be an adaptive cultural logic stemming from specific historical antecedents (for reviews, see Cohen, 1998; Fischer, 1989; Nisbett & Cohen, 1996). If valid, our honor index should be associated with these cultural antecedents. We examined the relationship between the honor index and the following variables: Gastil's southernness index, the percentage of land used for herding, the percentage of people who report a Scots-Irish heritage, and statewide economic precariousness.

Method

Gastil's (1971) Southernness Index. Gastil's (1971) southernness index measures the degree to which a state is likely to exhibit what he termed a "southern cultural influence" characterized by a "tradition of lethal violence." Gastil assigned each state a score based on its geography and representation of people with familial roots in southern states, with higher scores indicating a larger southern population.

Pasturing/Herding Land. Cultures of honor often emerge in communities with pastoral economies because such economies tend to exhibit economic precariousness and require that caretakers vigilantly attend to threats to livestock (e.g., theft, lack of food or water). To approximate this theoretical antecedent, we calculated the mean percentage of each state's total land area dedicated to pasturing herds by dividing estimates of the amount of acreage dedicated to grassland pasture and range by the total land area (in acres) of each state for the years 1969, 1978, 1987, and 1997 ($\alpha = .99$; U.S. Department of Agriculture, 2023). We used a log10 transformation to normalize the distribution. Higher percentages indicate that more land was historically dedicated to pastoral practices.

Scots-Irish Heritage. Scots-Irish settlement in the U.S. South (and later, the West) brought cultural norms and values that emphasized honor (Nisbett, 1993). We estimated the percentage of individuals in each state claiming Scots-Irish heritage

Table 3. State Honor Rankings and Scores.

Rank	State	Index score
1	Alabama[h]	92.95
2	Mississippi[h]	87.82
3	Wyoming[h]	86.10
4	Arkansas[h]	83.11
5	West Virginia[h]	81.07
6	Tennessee[h]	79.62
7	Louisiana[h]	75.99
8	Idaho[h]	75.84
9	South Carolina[h]	73.20
10	Montana[h]	70.55
11	Oklahoma[h]	70.35
12	Texas[h]	69.46
13	North Carolina[h]	65.93
14	Georgia[h]	62.73
15	Kentucky[h]	61.45
16	Nevada[h]	60.05
17	New Mexico[h]	58.93
18	Vermont[d]	54.78
19	North Dakota[d]	54.57
20	Utah[h]	54.25
21	Oregon[h]	53.93
22	Virginia[h]	52.29
23	Arizona[h]	50.75
24	Kansas[d]	48.53
25	Missouri[d]	47.98
26	Colorado[h]	47.28
27	Alaska[d]	46.24
28	Washington[h]	45.56
29	California[h]	43.00
30	South Dakota[d]	41.14
31	Florida[h]	40.74
32	Nebraska[d]	39.60
33	Minnesota[d]	39.00
34	Maine[d]	38.96
35	New Hampshire[d]	38.89
36	Delaware[h]	38.52
37	Wisconsin[d]	38.45
38	Pennsylvania[d]	35.86
39	Indiana[d]	34.90
40	Illinois[d]	30.52
41	Iowa[d]	29.02
42	Ohio[d]	27.89
43	Michigan[d]	27.27
44	Connecticut[d]	25.17
45	New York[d]	24.21
46	Maryland[h]	23.72
47	New Jersey[d]	22.57
48	Massachusetts[d]	22.27
49	Hawaii[d]	14.01
50	Rhode Island[d]	12.97

Note. The "h" and "d" superscripts denote states that were originally considered an honor or dignity state, respectively, based on the dichotomous classification (Cohen, 1998).

using data from 1990 and 2000 (U.S. Census Bureau, 1992, 2003). We averaged these two estimates ($r = .89$, $p < .001$), with higher scores indicating a greater percentage of individuals claiming Scots-Irish heritage.

Economic Precariousness. Economic precariousness has been theorized to help foster honor cultures (Nisbett & Cohen, 1996). To approximate this factor, we created a composite variable based on statewide estimates of poverty rates, unemployment rates, median income, and food insecurity. Statewide poverty rates were calculated by averaging estimates from 1980 and 1990 ($r = .80$, $p < .001$; U.S. Census Bureau, 2023). Statewide unemployment rates were calculated by averaging estimates from 1980 and 1990 ($r = .61$, $p < .001$; U.S. Bureau of Labor Statistics, 2019). Statewide median income was calculated by averaging estimates from the nearest available years, 1979 and 1989 ($r = .82$, $p < .001$; U.S. Census Bureau, 1981, 1991), which was then reverse-scored to be consistent with the other variables in the composite. Statewide food insecurity was calculated by averaging estimates of the percentage of households in each state that were food insecure between 1996 and 1998 ($\alpha = .89$; U.S. Department of Agriculture, 2023). We were unable to find historical data on food insecurity earlier than 1996, so we used the oldest year possible for our measure of economic precariousness. This composite variable of economic precariousness had acceptable reliability ($\alpha = .73$). Higher scores indicate greater economic precariousness.

Results and Discussion

Table 4 displays bivariate correlations between our honor index and variables representing theoretical antecedents to U.S. honor cultures. The pattern of results in Table 4 shows that, consistent with theoretical accounts of the origins of honor cultures in the United States, our honor index was associated with important ecological and historical antecedents, thereby providing further evidence for its validity.

The honor index was positively associated with Gastil's (1971) southernness index, demonstrating that our index tracked migration patterns of southerners across the United States. Our honor index was positively associated with the percentage of land in each state dedicated to pastoral and herding practices. Likewise, our honor index was positively associated with the percentage of each state claiming Scots-Irish heritage, a group theorized to have brought honor-based norms to the United States in the 18th and 19th centuries. Finally, the ecological condition of economic precariousness thought to precipitate honor cultures was positively associated with our honor index. Table 4 also displays the relative strength of associations with these antecedents between our honor index and Cohen's (1998) dichotomous classification. That Gastil's index is more strongly associated with the dichotomous classification than our honor index is

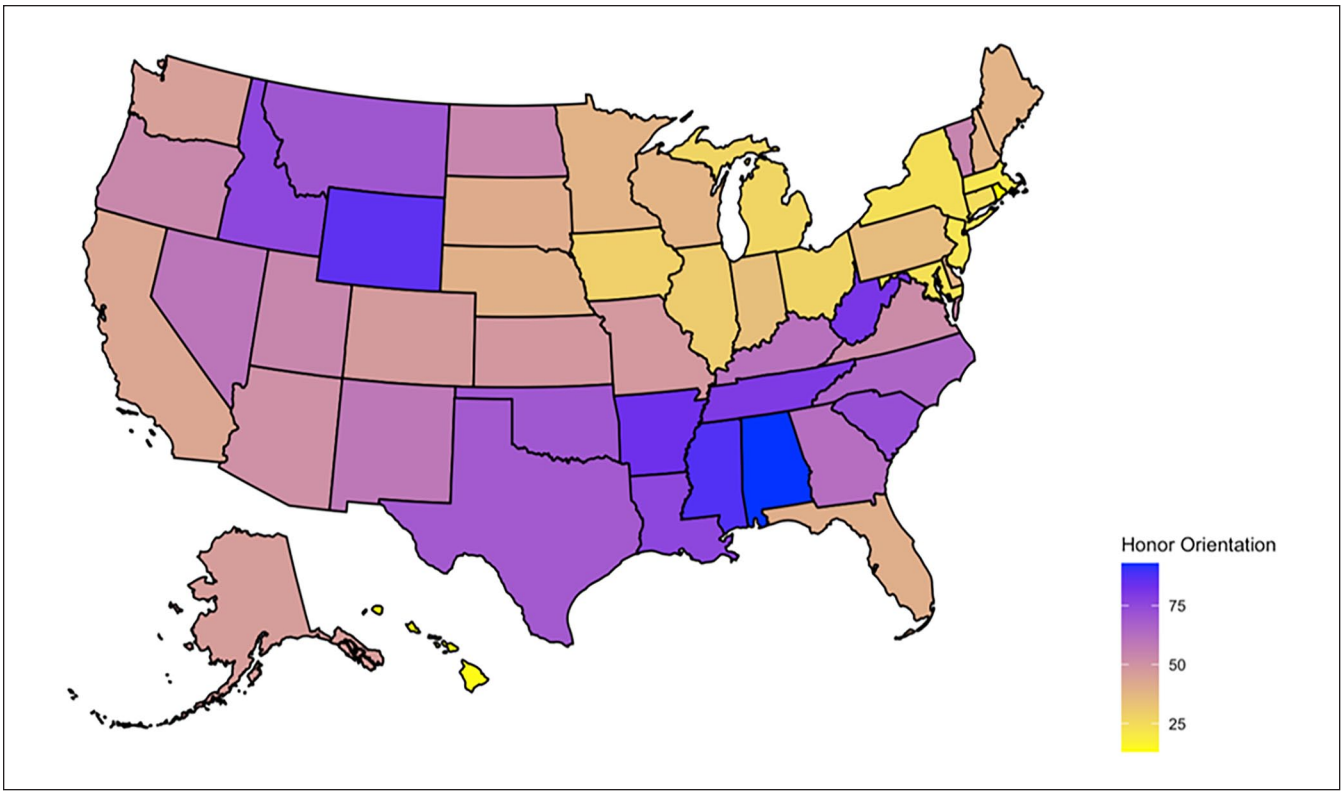

Figure 1. State-Level Honor-Orientation in the U.S. Based on the Honor Index.

Table 4. Bivariate Correlations Between Cultural Indicators and Cultural Antecedents to Honor.

Indicators and Antecedents	1.	2.	3.	4.	5.	6.
1. Honor Index	—					
2. Dichotomous Classification	.70***	—				
3. Gastil's Southernness Index	.61***	.69***	—			
4. % Pasturing/Herding Land	.37**	.43**	.22	—		
5. % Scots-Irish	.62***	.48***	.47***	−.02	—	
6. Economic Precariousness (Pre-2001)	.71***	.53***	.64***	.28*	.37**	—

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

unsurprising, given that the former treats all southern states as honor states. Although the dichotomous classification was slightly more associated than our honor index with the percentage of each state dedicated to pasturing/herding, associations between the honor index and the two other ecological antecedents were much stronger. Thus, not only does our honor index capture a greater degree of variability in statewide honor-orientation based on key cultural indicators, but that same benefit of variability is also seen in how the honor index better relates to historical and ecological antecedents of honor cultures. In Study 3, we further explore the performance of the honor index relative to the dichotomous classification by shifting our focus to the predictive validity for theoretically important outcomes.

Study 3: Examining the Predictive and Discriminant Validity of the Honor Index

As further validation, we tested whether our honor index would predict state-level outcomes (e.g., argument-related homicides) in ways consistent with theory and prior research using Cohen's (1998) dichotomous classification. For the sake of efficiency, we followed the example of Vandello and Cohen (1999) and combined explanations of the hypotheses with the method and results. As we noted previously, regional differences in honor-related outcomes have only been found among White men (and sometimes women), due to the link with historical immigration patterns of honor-oriented Scots-Irish settlers. Thus, whenever

Table 5. Bivariate Correlations Among Cultural Indicators and Covariates.

Indicators and Covariates	1.	2.	3.	4.	5.	6.	7.
1. Honor Index	—						
2. Dichotomous Classification	.70***	—					
3. Tightness–Looseness	.62***	.34*	—				
4. Economic Precariousness	.55***	.48***	.55***	—			
5. Religiosity	.58***	.41**	.89***	.58***	—		
6. Collectivism	−.001	.20	.22	.20	.36**	—	
7. Rurality	.52***	−.03	.38**	.18	.20	−.27†	—

Note. Economic Precariousness refers to composite scores based on data from time periods after 2001, which was the cutoff year for our honor index.
†$p < .06$. *$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.

outcomes can be tracked distinctly among White and non-White demographic groups, their associations with regional differences in honor will tend to be stronger among the former than the latter. For this reason, we separated statewide estimates of each outcome variable in Study 3 by race/ethnicity to the extent possible, given the constraints of using archival data collected by U.S. government offices.

In addition to varying in their honor-orientation, U.S. states also vary in their cultural tightness–looseness (Harrington & Gelfand, 2014). Although honor and tightness–looseness share some commonalities, they are conceptually and theoretically distinct. Tightness–looseness is a cultural dimension primarily concerned with how the strength of social norms—whatever those norms might be—affects and governs behavior, whereas honor is a cultural dimension primarily concerned with reciprocity and the defense and management of reputation, with specific prescriptions and proscriptions for men and women. To assess the validity of our honor index, we examined several important honor-related outcomes (for predictive validity) and tightness–looseness-related outcomes (for discriminant validity).

We note that the honor index is similar to the dichotomous classification in its correlations with our outcome variables (see Table 6). However, we cannot take these zero-order associations at face value, as it is necessary to control for other statewide covariates. In addition, the honor index provides a continuous measure of statewide honor-orientation that does not rely on geographical boundaries from the U.S. Census; instead, it is composed of variables theoretically representative of the culture of honor. For each outcome variable, we conducted separate regression analyses for each cultural measure (honor index, dichotomous classification, and tightness–looseness) with the same control variables (economic precariousness, religiosity, collectivism, and rurality) entered in Step 1, followed by one of our cultural measures in Step 2. Religiosity was not included as a covariate in models with tightness–looseness because religiosity was a variable used in the creation of that index. Table 5 displays bivariate correlations among the three cultural measures and covariates.[6] Table 6 displays bivariate correlations between our focal outcome measures and all predictor variables. Table 7 displays results of our regression analyses (Step 2 only). We note that some people may be further interested in how our honor index compares with another similar index created by Lin and colleagues (2022). In addition to analyses reported here, we conducted additional regressions to explore the predictive validity of our index compared with Lin and colleagues' (2022) index. Detailed results and descriptions of all variables and their sources used in Study 3 can be found in Supplemental Materials, including results using Lin and colleagues' (2022) index.

Establishing the Predictive Validity of the Honor Index

Hypothesis 1a and 1b: The Honor Index Will Predict Higher White (But Not Non-White) Argument-Related Homicide Rates But Will Not Predict Felony-Related Homicide Rates. Consistent with prior work that found honor states have higher rates of argument-related (but not felony-related) homicide rates among White (but not non-White) males aged 15 to 34 years (Brown, Imura, & Osterman, 2014; Cohen, 1998), we examined White and non-White argument-related and felony-related homicide rates (per 100k) among 15- to 34-year-old males for each state from 2002 to 2020.

In support of Hypothesis 1a, our honor index significantly predicted higher White ($p = .005$, $\Delta R^2 = .14$) but not non-White argument-related homicide rates ($p = .202$; see Table 7). In support of Hypothesis 1b, our honor index did *not* significantly predict White *felony*-related homicide rates ($p = .106$); it did, however, significantly predict *lower* non-White felony-related homicide rates ($p = .030$, $\Delta R^2 = .08$).

The dichotomous classification significantly predicted higher White argument-related homicide rates ($p = .033$, $\Delta R^2 = .09$), but lower non-White argument-related homicide rates ($p = .030$, $\Delta R^2 = .07$). In addition, the dichotomous classification did not predict White felony-related homicides ($p = .481$), but it did significantly predict lower non-White felony-related homicides ($p = .009$, $\Delta R^2 = .11$). In contrast to results for both honor measures, tightness–looseness did not significantly predict White argument-related homicide

Table 6. Bivariate Correlations Between Cultural Indicators, Covariates, and All Outcomes.

Variable	Honor index	Dichotomous classification	Tightness–looseness	Economic precariousness	Religiosity	Collectivism	Rurality
Honor-Related Outcomes							
Argument Homicide Rates (Whites)	.39**	.40**	.12	.35*	.09	.12	.04
Argument Homicide Rates (Non-Whites)	.30*	.03	.55***	.42**	.47***	.19	.28*
Felony Homicide Rates (Whites)	.20	.26†	.11	.25	.11	.29*	−.18
Felony Homicide Rates (Non-Whites)	.16	−.02	.49***	.27†	.43**	.31*	.12
Domestic Homicide Rates (Whites)	.49***	.55***	.08	.21	.03	.06	.05
Domestic Homicide Rates (Non-Whites)	.25	−.01	.48***	.29*	.37**	.13	.32*
Teen Dating Violence (Whites)	.49***	.42**	.45**	.32*	.42**	.21	.19
Teen Dating Violence (Non-Whites)	.56***	.24	.44**	.08	.31*	−.08	.51***
Suicide Rates (Whites)	.63***	.63***	.13	.40**	.13	−.04	.13
Suicide Rates (Non-Whites)	.23	.02	−.10	.02	−.12	−.45***	.33*
Accidental Death Rates (Whites)	.63***	.46***	.50***	.66***	.38**	.02	.42**
Accidental Death Rates (Non-Whites)	.45***	.15	.33*	.35*	.31*	−.21	.43**
Statewide Mental Health Resources	−.52***	−.57***	−.57***	−.52***	−.70***	−.20	.06
Tightness–Looseness-Related Outcomes							
Conscientiousness	.33*	.27†	.48***	.35*	.60***	.12	−.03
Openness to Experience	−.19	.27†	−.42**	−.01	−.35*	.34*	−.53***
Creativity (Number of Patents)	−.35*	.003	−.23	−.15	−.11	.07	−.59***
Happiness	−.19	−.16	−.61***	−.32*	−.59***	−.28†	−.09

†$p < .08$. *$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.

rates ($p = .430$), but it did significantly predict higher non-White argument-related homicide rates ($p = .046$, $\Delta R^2 = .06$). Tightness–looseness was also unrelated to felony-related homicides among both Whites ($p = .574$) and non-Whites ($p = .068$).

Hypothesis 2a and 2b: The Honor Index Will Predict Higher White (But Not Non-White) Domestic Homicide Rates and Teen Dating Violence. Consistent with prior research that found honor states have higher rates of domestic homicide rates among White males and a higher percentage of White teens reporting teen dating violence (Brown et al., 2018), we examined White and non-White domestic homicide rates (per 100k) committed by males aged 15+ against females for each state from 2002 to 2020. For teen dating violence, we calculated the percentages of White and non-White females across Grades 9 to 12 that experienced physical dating violence in each state from 2013 to 2021.

Supporting Hypothesis 2a, our honor index significantly predicted higher White ($p < .001$, $\Delta R^2 = .35$) but not non-White domestic homicide rates ($p = .198$). The dichotomous classification also significantly predicted higher White ($p < .001$, $\Delta R^2 = .28$) but not non-White domestic homicide rates ($p = .065$). Tightness–looseness did not predict White ($p = .594$) or non-White domestic homicide rates ($p = .117$).

Supporting Hypothesis 2b, our honor index predicted higher percentages of White teens who experienced physical dating violence in the past year ($p = .034$, $\Delta R^2 = .08$). However, contrary to expectations, our honor index also predicted the percentage of non-White teens who experienced physical dating violence in the past year ($p = .008$, $\Delta R^2 = .11$). The dichotomous classification did not predict the percentage of White ($p = .080$) or non-White teens ($p = .101$) who experienced physical dating violence in the past year. Tightness–looseness did not predict physical dating violence for White teens ($p = .062$), but it did significantly predict

Table 7. Regression Analyses (Standardized Regression Coefficients) for Honor-Related and Tightness–Looseness-Related Outcomes (Step 2 Only).

	Honor index		Dichotomous classification		Tightness–looseness	
Outcomes	Whites	Non-Whites	Whites	Non-Whites	Whites	Non-Whites
Honor-Related Outcomes						
Argument-Related Homicide Rates	**0.57****	−0.24	**0.34***	−0.31*	−0.15	0.33*
Felony-Related Homicide Rates	0.32	−0.45*	0.11	−0.40**	−0.10	0.32
Domestic Homicide Rates	**0.89*****	−0.25	**0.62*****	−0.28	−0.10	0.27
Teen Dating Violence	**0.44***	0.50**	**0.29**	0.25	0.34	0.44**
Suicides Rates	**0.97*****	0.33	**0.66*****	0.20	−0.12	−0.11
Accidental Death Rates	**0.35***	0.22	**0.27***	0.09	0.10	0.22
Statewide Mental Health Resources	**−0.31***		**−0.27***		−0.53***	
Tightness–Looseness-Related Outcomes						
Conscientiousness	−0.03		−0.01		0.49**	
Openness to Experience	0.23		0.24*		−0.66***	
Creativity (Number of Patents)	−0.23		−0.10		−0.09	
Happiness	0.29		0.11		−0.66***	

Note. The Honor Index, Dichotomous Classification, and Tightness–Looseness were entered in Step 2 in separate models. For all models, economic precariousness, religiosity, collectivism, and rurality were entered as covariates in Step 1. As previously noted, religiosity was excluded as a covariate for Tightness–Looseness models given that religiosity is part of that index. Boldfaced outcomes represent those that prior work found to be associated with honor cultures.
*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.

higher physical dating violence for non-White teens ($p = .009$, $\Delta R^2 = .11$).

Hypothesis 3: The Honor Index Will Predict Higher White (But Not Non-White) Accidental Death Rates. Consistent with prior research on risk-taking that found honor states have higher accidental death rates among White, but not non-White, individuals (Barnes, Brown, & Tamborski, 2012), we examined White and non-White accidental death rates (per 100k) among those aged 15+ for each state from 2002 to 2020.

Supporting Hypothesis 3, our honor index significantly predicted higher White ($p = .025$, $\Delta R^2 = .06$) but not non-White accidental death rates ($p = .351$). The dichotomous classification also significantly predicted higher White ($p = .027$, $\Delta R^2 = .05$) but not non-White accidental death rates ($p = .553$). Tightness–looseness did not significantly predict White ($p = .466$) or non-White accidental death rates ($p = .281$).

Hypothesis 4: The Honor Index Will Predict Higher White (But Not Non-White) Suicide Rates. Consistent with prior research that found honor states have higher suicide rates among White, but not non-White, individuals (Osterman & Brown, 2011), we examined White and non-White suicide rates (per 100k) among people aged 15+ for each state from 2002 to 2020.

Supporting Hypothesis 4, our honor index significantly predicted higher White ($p < .001$, $\Delta R^2 = .42$) but not non-White suicide rates ($p = .091$). The dichotomous classification also significantly predicted higher White ($p < .001$, $\Delta R^2 = .32$) but not non-White suicide rates ($p = .187$). Tightness–looseness did not predict White ($p = .531$) or non-White suicide rates ($p = .329$).

Hypothesis 5: The Honor Index Will Predict Lower Statewide Investments in Mental Health Resources. Consistent with prior research that found honor states invest less in mental health resources than dignity states (Brown, Imura, & Mayeux, 2014), we created a composite mental health variable based on mental health spending and resources for years between 2000 and 2006.

In support of Hypothesis 5, our honor index significantly predicted lower statewide investments in mental health resources ($p = .032$, $\Delta R^2 = .04$), as did the dichotomous classification ($p = .012$, $\Delta R^2 = .05$). Tightness–looseness also predicted lower statewide funding for mental health ($p < .001$, $\Delta R^2 = .16$), an effect that surprisingly was stronger than either honor measure.

Summary of Predictive Validity Results

Our results indicated that our honor index has strong predictive validity in relation to previously established outcomes. Compared with the dichotomous classification, regression analyses revealed that our honor index was a better predictor of all predicted outcomes (in some cases, such as investments in mental health care resources, it was only slightly stronger, but in others, such as argument-related homicides, it was substantially stronger). It predicted White, but not non-White, argument-related homicides, domestic homicides, suicide

rates, and accidental death rates. It also predicted physical dating violence among White teens, although it also unexpectedly predicted dating violence for non-White teens. Although highly honor-oriented states also tend to be relatively tight, tightness–looseness was not a significant predictor of any honor-oriented outcome variables for White populations after we controlled for relevant covariates, which supports the theoretical uniqueness of the culture of honor construct for explaining behaviors of White Americans. Our honor index and the dichotomous classification predicted investments in statewide mental health resources to approximately the same degree. Unexpectedly, tightness–looseness was a better predictor than either of the two honor measures of state investments in mental health resources.

Establishing the Discriminant Validity of the Honor Index

As noted at the beginning of Study 3, honor and tightness–looseness have some commonalities (as evidenced by the correlation with our honor index, $r = .62$; see Table 5), but they are conceptually distinct. To establish the discriminant validity of the honor index, we chose a set of unique, preregistered outcomes that are theoretically relevant to cultural tightness–looseness. Harrington and Gelfand (2014) found that people in tighter states are higher in conscientiousness, but lower in openness to experience, creativity, and happiness. Looser states allow people to deviate from norms and to perceive fewer constraints on their behavior, leading to more openness to try new things, more creative products, and more opportunities to find happiness. Theoretically, honor values and beliefs are unrelated to these characteristics, so we conducted regression analyses with the same covariates for our honor index and tightness–looseness. As shown in Table 7, our honor index was not significantly related to statewide levels of conscientiousness ($p = .863$), openness to experience ($p = .067$), creativity ($p = .193$), or happiness ($p = .110$). In contrast, tightness–looseness was positively related to conscientiousness ($p = .003$, $\Delta R^2 = .13$), negatively related to openness to experience ($p < .001$, $\Delta R^2 = .24$) and happiness ($p < .001$, $\Delta R^2 = .24$), and nonsignificantly related to statewide levels of creativity ($p = .551$).

General Discussion

Across three studies, we created and validated a continuous index that captures the variation in the cultural norms of honor across U.S. states. This index will be a useful tool in explaining regional variation in policies and practices that influence public safety (e.g., firearm laws) and public health (e.g., funding for mental health resources; Gul et al., 2021).

Advantages of the Honor Index

A key advantage of our honor index is its theoretically driven approach to selecting indicators encompassing the cultural norms and values of honor that emphasize strict gender roles, retributive violence, and the importance of retaliation and self-defense, rather than relying simply on geographical boundaries set by the U.S. Census Bureau. As a result, our honor index avoids some of the problems of previous indices, such as being categorical and relying on arbitrary regional boundaries. Study 2 demonstrated that our honor index is associated with key historical and ecological antecedents to honor cultures (Brown, 2016; Nisbett & Cohen, 1996), and Study 3 demonstrated that our honor index exhibited strong predictive and discriminant validity.

We note that there is considerable conceptual overlap between our index and Lin and colleagues' (2022) recent honor index, as both include two of the same variables (i.e., execution rates and military enlistment rates). Despite this similarity, our index avoids a crucial pitfall of the statewide honor indices created by Lin et al. (2022) and Brown, Carvallo, and Imura (2014)—specifically, the inclusion of variables in each of these previous indices that are better construed as important *outcomes* of honor-related norms (e.g., interpersonal violence). In Study 3, our index also predicted preregistered outcomes in a demographically distinct pattern consistent with prior research using the dichotomous classification. For instance, our honor index predicted White (but not non-White) argument-related homicide and domestic homicide rates, but not felony-related homicides (Brown et al., 2018; Cohen, 1998). We also examined outcomes associated with cultural tightness–looseness (Harrington & Gelfand, 2014) to assess the discriminant validity of our index. Although our honor index was strongly related to the tightness–looseness index, it did not predict any of the tightness–looseness outcomes, thus further demonstrating its validity.

Potential Limitations of the Honor Index

The most obvious limitation of our honor index is its inability to capture *within-state* variability, a limitation common to other statewide cultural indices as well (Harrington & Gelfand, 2014; Vandello & Cohen, 1999). We do not suggest that living in a given state provides a homogeneous experience for all residents—for instance, cities can foster unique cultures compared with rural areas (Sevincer et al., 2017). Even the most honor-oriented state, Alabama, might have pockets of people endorsing tenets of dignity cultures. In addition, several other cultural groups in the United States, such as Latinos, military service members, and gang members, might be socialized to endorse the cultural norms of honor regardless of their state of residence.

The present research used broad indicators that include data from people of different racial/ethnic backgrounds to create a state-level honor index that predicts race-specific outcomes. Just as the dichotomous classification is based on race-/ethnicity-*neutral* criteria (i.e., U.S. Census divisions) but is used to predict race-/ethnicity-*specific* outcomes, we created an index that was not derived from data coming

strictly from White Americans, as few of our indicator variables are available (or even meaningful) at a group-specific level (e.g., statewide gun laws). Despite this limitation, and consistent with prior research, statewide differences in honor-related outcomes occurred almost exclusively among White people, as we predicted.

Other recently developed honor indices have taken the opposite approach (Brown, Carvallo, & Imura, 2014; Lin et al., 2022) by including indicator variables specific to White, non-Hispanic individuals (e.g., suicide rates among White, non-Hispanic Americans). These indices were then used to predict outcomes across demographic groups (e.g., naming patterns). Although a case can be made for such an approach, we argue that the race-/ethnicity-specific variables used in these prior efforts to create honor indices are better viewed as *outcomes* of honor, as we have already noted. Consequently, such approaches result in indices that cannot be used to predict many important outcomes of interest, as these very outcomes were used in the creation of the indices.

The present study used data collected prior to 2001 to create the honor index and outcome data collected after 2001 to validate the index. Thus, we relied on behavioral and attitudinal data from over 20 years ago that might have fluctuated over time (Varnum & Grossmann, 2021). Likewise, over the past 20 years, several important events could have changed the strength of norms and ideals related to honor (e.g., the introduction of the smartphone in 2012 which can increase awareness of one's social image and reputation). Future research could investigate how honor-oriented norms and expectations have fluctuated across time and whether these fluctuations have repercussions for other psychological and social phenomena. One advantage of our continuous honor index is that such fluctuations can be examined empirically, as a function of both changes in the rank order of states and changes in the honor-orientation of all states over time.

Finally, there are certainly limits on the generality of our honor index and the variables that it comprises. Statewide differences in U.S. honor norms are, in large part, based on Scots-Irish settlers, and our honor index, therefore, reflects this historical idiosyncrasy to some degree. However, honor cultures exist all around the world (e.g., South America, the Middle East) and undoubtedly have their own idiosyncrasies in terms of historical and ecological roots, prioritized values, and even behavioral consequences of honor (see Rodriguez Mosquera, 2016). For instance, many countries no longer allow the use of execution for any criminal offense, making this variable unusable in the creation of a region-specific index of honor-orientation within those countries. Thus, it would be unwise to create other country-specific (or international) indices of honor cultures using antecedents, indicators, and outcomes specific to U.S. honor culture. Finally, the present work did not examine the extent to which the honor index predicted individual-level endorsement of honor. The honor index attempts to assess norms and values at the state level, but it is possible that the attitudes of individuals living in these states might align or not align with the honor-orientation of their current state. We urge future researchers to examine the extent to which state-level honor predicts individual-level attitudes.

Applications and Conclusions

This new continuous honor index will be useful for educators, public health researchers, and policymakers seeking to address state-level issues that are relevant to the dynamics of honor. Gul and colleagues (2021) summarized several negative consequences of cultures of honor in the United States, such as high levels of school violence, intimate partner aggression, and reluctance to seek mental health treatment. This state-level index can target interventions for these and other concerns so that they reflect and respect the strength of honor norms and values in a particular state. Indeed, our index can be used to understand which states are at the highest risk for specific health outcomes and, more importantly, to inform the development of outcome-specific honor-oriented messaging within different states. An example of such a message tailored to an honor context is the motto, "Don't mess with Texas." This motto was coined as part of an anti-littering campaign, but it has been very effective due to its resonance with the state's self-image as tough and quick to respond to collective affronts. Other policy domains that could be investigated using this tool include policing reform and health care. The culture of honor is potent and evident in the United States, and with this continuous honor index, we provide a valuable tool for future researchers and policymakers to understand the impact of this powerful dimension of culture on individuals and groups.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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Data Availability Statement

Study materials and full data sets used for the present research as well as analysis scripts necessary to reproduce the findings are publicly available (https://osf.io/tn5dj/). All hypotheses and plans of analyses were preregistered (https://osf.io/jvgdm).

Supplemental Material

Supplemental material is available online with this article.

Notes

1. A cultural logic of face is frequently used to describe East Asian contexts, but this cultural logic has not been used to describe U.S. states.
2. The focus on White male homicide rates is due to the aforementioned historical immigration of the Scots-Irish into the southern and western United States, and the contrasting absence of regional differences in Black homicide rates (Nisbett & Cohen, 1996).
3. Alaska and Hawaii, though in the West Census region, were excluded from western states and classified as dignity states because they do not share the same regional heritage common to the other western states.
4. Siegel and colleagues' (2017) database contains gun laws spanning 1991–2018, and the yearly estimates were extremely internally consistent ($\alpha = .997$). The average number of gun laws across this 26-year period ($M = 23.73$, $SD = 21.60$) did not differ from the average number of gun laws in 2001 ($M = 24.02$, $SD = 22.16$), $t(49) = -0.78$, $p = .439$.
5. Despite a two-generation state patronym score not loading onto the latent honor factor, the three-generation patronym scores from Brown, Carvallo, and Imura (2014) were correlated with the U.S. honor index based on the remaining six variables ($r = .30$, $p = .034$).
6. Consistent with the dichotomous classification, we observed a near-zero correlation between the honor index and collectivism. Although some nations around the world might exhibit high levels of both honor and collectivism, we see little reason to expect a strong association between these variables *within* a specific culture, or at an individual level of analysis (e.g., honor value endorsement and interdependent self-construal).

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