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Death Before Dishonor: Incurring Costs to Protect Moral Reputation

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Abstract

Predicated on the notion that people's survival depends greatly on participation in cooperative society, and that reputation damage may preclude such participation, four studies with diverse methods tested the hypothesis that people would make substantial sacrifices to protect their reputations. A "big data" study found that maintaining a moral reputation is one of people's most important values. In making hypothetical choices, high percentages of "normal" people reported preferring jail time, amputation of limbs, and death to various forms of reputation damage (i.e., becoming known as a criminal, Nazi, or child molester). Two lab studies found that 30% of people fully submerged their hands in a pile of disgusting live worms, and 63% endured physical pain to prevent dissemination of information suggesting that they were racist. We discuss the implications of reputation protection for theories about altruism and motivation.

Keywords

reputation, morality, dishonor, motivation, altruism

Humans are an unusually cooperative species, in that people are highly cooperative even with unrelated others (Gintis, 2000). Indeed, people's very survival depends in large part on their ability to cooperate with other people (Nowak & Highfield, 2011; Tomasello, 2014). The rare ascetic hermit aside, humans satisfy essentially all of their needs through cooperation with others in society. People buy food farmed by others, live in dwellings built by others, wear clothing made by others, and are protected by police and armies that comprises others. This is not a relic of modern, Western culture. Hunter-gatherers obtain the vast majority of their food through cooperative hunting and gathering or through sharing collected resources in a common pool (Hill, 2002; Hill & Hurtado, 1996). In short, creating and exploiting the benefits of a cooperative society is the human survival strategy (Baumeister, 2005).

Cooperation is a risky strategy because individuals who cheat and free ride off the labor of others come out ahead if precautions are not taken, and such antisocial individuals threaten to undermine the benefits of cooperation for others (Fehr & Gächter, 2000). People use several strategies to avoid helping uncooperative others (Nowak, 2006).

Keeping track of reputation is one way by which people incentivize good behavior and enable cooperation with others. Reputation provides information about one's qualities as a social partner (Milinski, Semmann, & Krambeck, 2002; Pizarro & Tannenbaum, 2011; Van Vugt & Hardy, 2009). Although people seek out partners who possess particularly good reputations (Sylwester & Roberts, 2010), people are even more vigilant in avoiding and punishing partners with bad reputations (Rand & Nowak, 2013). Being immoral is an especially bad reputation to have—people see it as being worse than being incompetent or mean (Goodwin, 2015; Goodwin, Piazza, & Rozin, 2014)—likely because immorality is a sign that one is likely to cheat others and undermine the collective good wrought from cooperation (Tomasello & Vaish, 2013). Immorality can even taint otherwise good qualities such as warmth and competence, which can seem conniving in an immoral person (Landy, Pizza, & Goodwin, 2016).

A good reputation (or at least the absence of a bad one) is like a key that unlocks the benefits provided by society (Milinski et al., 2002; Wu, Balliet, & Van Lange, 2016). Getting a bad reputation means losing that key. Because cooperative society is humans' survival strategy, losing that key is potentially devastating. Although extreme survivalists like Bear Grylls can apparently survive on their own in the wilderness,

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Table 1. Responses to the World Values Survey (2015) Indicate That Across 100 Countries, People Rated Moral Reputation as More Important Than All Nonmoral Values Other Than Security.

Value	Mean[a]	95% CI	*N*	*F*	*p*	η_p^2
"to avoid doing anything people would say is wrong"	4.44	[4.43, 4.44]	156,639	—	—	—
"to be rich"	3.14	[3.13, 3.15]	156,502	69,827.76	<.001	.315
"to have an exciting life"	3.23	[3.22, 3.24]	155,497	55,790.42	<.001	.269
"to have a good time"	3.73	[3.72, 3.74]	156,478	19,735.46	<.001	.115
"to be very successful"	4.02	[4.02, 4.03]	155,835	9,134.30	<.001	.057
"to do things one's own way"	4.26	[4.26, 4.27]	155,641	1,474.10	<.001	.010
"living in secure surroundings"	4.60	[4.59, 4.60]	156,907	1,901.53	<.001	.012

Note. Omnibus repeated measures ANOVA: $F(6, 911{,}946) = 31{,}631.60$, $p < .001$, $\eta_p^2 = .172$.
[a]Answers were reverse-coded, so that higher numbers represent more important values.

for most people, banishment from society means death. Indeed, the ancients considered banishment to be a worse punishment than death, because it was a prolonged yet nearly inevitable death (Armstrong, 1963). Even when a bad reputation does not lead to banishment, the consequences are dire. Employers and homeowners may withhold jobs, promotions, and housing from people they deem criminal or immoral (Logan, 2013). Reputation damage from a criminal conviction is associated with a 10–30% decrease in annual earnings, even after release from jail or prison (Western, King, & Weiman, 2001). Former friends may disassociate from people they now consider immoral. People whose reputations leave them socially isolated are more likely than others to die from a variety of causes (House, Landis, & Umberson, 1988).

Because cooperation is humanity's survival strategy, and because a bad reputation can severely damage one's prospects for cooperating with others, we predicted that people would strive to avoid a bad reputation. There is historical evidence that at least some individuals took extreme measures to avoid reputation damage. In the 18th and 19th centuries, some gentlemen, including future president Andrew Jackson and sitting vice president Aaron Burr, protected their honor by dueling one another. Japanese samurai often chose ritual suicide over dishonor (Fusé, 1980). In the Middle East, families sometimes kill loved ones who engaged in premarital sex, rather than suffer familial dishonor (Kulczycki & Windle, 2011). Throughout history, people have occasionally chosen death rather than dishonor—but were these people exceptional or were they normal people in abnormal circumstances requiring them to make the ultimate sacrifice?

The present research tested whether these (perhaps rare and unusual) historical examples of individuals making great sacrifices to protect reputation might indicate a more fundamental truth about humanity: Many ordinary people are willing to make large sacrifices to protect their reputations. Ethically, testing this is a challenge, as scientists cannot actually tarnish people's reputations nor allow them to sacrifice life or limb. We therefore used diverse approaches with different strengths and weaknesses to test aspects of this hypothesis. Study 1 tested the relative importance of moral reputation compared to other values from people in 100 countries. Study 2 was a collection of online mini-studies asking people to make hypothetical choices between loss of reputation and other major costs: jail time, amputation, and death. In lab, we could not assess whether people would actually sacrifice the things people said they would sacrifice hypothetically. Instead, Studies 3 and 4 tested whether people would put themselves in pain or do a very disgusting thing to preserve their reputations. All studies were approved by the Human Subjects Committee at Florida State University. All measures, manipulations, and exclusions in the experimental studies are disclosed.

Study 1: The International Value of Reputations

Study 1 explored people's relative valuations of maintaining a moral reputation. Presumably, people would prefer to uphold their most important values at the expense of less important values. Data were compiled from 100 countries in the sixth wave of the World Values Survey (2015). Moral reputation concern was measured by the item "It is important to this person to always behave properly; to *avoid doing anything people would say is wrong*" (our emphasis), on a 6-point Likert-type scale (*very much like me* to *not at all like me*). Repeated measures analysis of variance and within-subjects contrasts compared people's moral reputation concern with nonmoral values from Schwartz (1992); see Table 1. People around the world rated moral reputation as more important than any nonmoral value other than physical security. Men ($M = 4.42$, 95% CI [4.41, 4.43]) and women ($M = 4.45$, 95% CI [4.44, 4.46]) made nearly identical ratings of reputation's importance, $\eta^2 = .00015$.

Study 2: Reputation in Hypothetical Situations

Study 2 tested the hypothesis that normal people would make major hypothetical sacrifices to protect their moral reputations. Three samples of students and American Mechanical Turk workers read vignettes and made hypothetical choices about whether to protect their reputation or avoid harmful consequences. In Study 2a, participants chose between several durations of jail time and a criminal reputation, though we only report one duration below. In Study 2b, participants chose

Table 2. Results of Study 2 Suggest High Percentages of People Would Hypothetically Choose Jail, Amputation of Their Dominant Hand, or Death, Rather Than a Bad Reputation.

Choice	Sample	Percentage of Participants Protecting Reputation [95% CI]		
		Overall	Men	Women
Cost: You will spend 1 year in jail. Once you have completed your time in jail, you will no longer be considered a criminal by your community. Reputation damage: You will spend no time in jail. However, you will be forever labeled a criminal by your community	2a: 118 American Mechanical Turkers; 82 female; 7 failed attention check	40% [31, 50]	38% [18, 59]	41% [30, 52]
Cost: A doctor would amputate your dominant hand. Reputation damage: You would get a swastika tattooed prominently on your face. Everyone you met would assume you were a Neo-Nazi when they saw you. You would not be allowed to explain to anyone, including family, friends, and strangers, why you have the tattoo on your face	2b: 166 University students; 98 female; 4 failed attention check	70% [63, 77]	60% [47, 72]	77% [69, 86]
Cost: You will die right now. Reputation damage: You will live into your 90s, but everyone in your community will think you are a pedophile who sexually abuses children (you will not actually be a pedophile, but will have no way of proving you are not)	2c: 115 American Mechanical Turkers; 73 female; 3 failed attention check	53% [44, 63]	35% [19, 51]	62% [50, 73]
Cost: You will die right now and will be remembered fondly by your community Reputation damage: You will live into your 90s, and everyone will hold you in high esteem until your death. After you die, however, (false) rumors will spread throughout your community that you were a pedophile and had abused children. There will even be articles about it in the newspaper. The rumors will never be disproven and everyone in your community will think you were a pedophile who abused children	2c	30% [22, 39]	22% [8, 36]	34% [23, 45]

between a Nazi's reputation and amputation of various limbs, but we only report one comparison below. In Study 2c, participants chose between death and a child molester's reputation.

Results and Discussion

High percentages of participants chose jail time, amputation, and death rather than suffer reputation damage (see Table 2). Slightly more than half of participants preferred death to a lifetime reputation as a child molester. The average age of the participants who chose death over reputation damage was 34.97. Therefore, immediate death would entail the loss of over half of each participant's expected life. Yet, half of participants made that choice.

This preference may be rational—life as a child molester would be fraught with social difficulties and potential harm. To take an example, the Danish film, *The Hunt*, portrays how false accusations of molestation ruin a man's life. Even after the charges against him are dropped, the local grocer will not allow him to shop in his store, and the employees of the store physically assault him to prevent him from buying groceries. Perhaps, a life with such an ignominious reputation would not be worth living.

A subsequent finding was more striking. Thirty-one percent of participants chose death instead of a long lifetime with a normal reputation followed by a posthumous reputation as a pedophile. Thus, even when there would be no impact of the negative reputation during one's lifetime, many participants chose to incur the ultimate cost to avoid a negative posthumous reputation.

Study 3: Touching Worms to Avoid Reputation Damage

The previous studies were limited by their reliance on hypothetical scenarios. Ideally, to increase the validity of these findings, an experiment would be conducted in which people

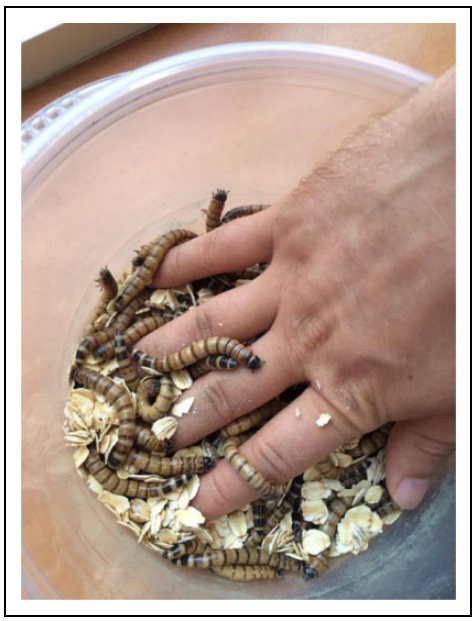

Figure 1. In Study 3, participants chose between placing their hand in a bucket of worms (shown above) and spreading information suggesting that they are racist.

were made to choose between actual damage to their reputation and actual damage to the self (via loss of life, limb, freedom, etc.). Such an experiment could not be done ethically; however, because researchers cannot actually damage participants' reputations nor cause permanent harm to them.

Studies 3 and 4 were our best attempts to conduct ethically acceptable studies in which people would choose to ostensibly protect their reputation from harm by instead enduring a highly undesirable task. Study 3 tested the hypothesis that people would submerge their hand in a bucket of live, squirming, extremely disgusting worms (see Figure 1), rather than suffer ostensible reputation damage (i.e., dispersing information that they are secretly racist against African Americans). Superworms were chosen because they are repugnant but harmless.

Method

Participants. One hundred and twenty-three Florida State undergraduates (mean age = 18.94, range = 18–25, 81 women) were recruited to the lab for a "social judgment study" in exchange for course credit. Sample size was chosen to be larger than 50 per cell, with data collection continuing until the end of the semester. Only non-Black participants were included in analyses (20 African American participants were excluded), although the pattern of results is robust to the inclusion of those excluded participants. One participant was excluded because they said they did not see the racism score on the computer. Three participants (all in the high racism condition) did not wish to touch the worms or report their score and instead opted to end the experiment early. The resulting sample size had 80% power to detect $d = .57$.

Procedure. Participants were first asked to complete a demographics questionnaire. Next, they were informed that Florida State University (FSU) was undergoing an investigation of implicit racism among its student population. As part of this investigation, FSU would be administering a test of implicit racism to students and then sharing the scores with the larger FSU community. To heighten realism, participants were shown a printed version of the e-mail that would be ostensibly sent out to the university's students, faculty, and staff. In the e-mail, several negative consequences of implicit racism were outlined (i.e., unfair hiring decisions, making African Americans feel uncomfortable, higher likelihood of physical assault) as well as a chart delineating how to interpret the implicit racism scores (as ostensibly measured by the implicit associations test [IAT]; see Figure 2). Underneath this chart was a space for the participant to write his or her name, major, and implicit racism score. The e-mail specified that the names of participants with the highest scores would be listed first, to heighten the salience of potential reputation damage.

Next participants were introduced to the IAT and informed that because the computer measures responses down to the millisecond, it was a highly accurate measure of implicit attitudes. Participants were asked to complete the task and write down the score they were given on the e-mail paper. They were told that after doing this, they would be given the option of completing another task rather than having their score broadcasted.

Participants completed a real IAT, but their actual results were not recorded. The IAT was rigged to give participants one of the two scores: 31, indicating moderately low implicit racism, or 97, indicating extremely high implicit racism. A score of 31 was chosen as the low racism score, so that it would not be so low that participants would wish to brag, but not so high that they would be overly concerned about appearing racist. After participants completed the computerized IAT and wrote down their ostensible scores, research assistants explained the alternative task. They informed participants that next semester FSU would be conducting a study using superworms and that the procedures still needed to be pretested. If the participants would rather not have their scores broadcasted, they could submerge their hands in the superworm container for a full minute, letting the worms crawl over them. At this point, the research assistant opened the superworm container to let the participants see the worms.

Before the participants made their decisions, they read aloud the printed text of the e-mail that ostensibly would be sent to all of the students, faculty, and staff of their university should they choose to broadcast their scores. After reading the ostensible e-mail aloud, participants were asked to choose between sharing the e-mail and putting their hand in the container of worms. All participants then rated the disgustingness of the worms just by looking at them.

If the participant chose to complete the worm task, they were then instructed to submerge their hand for 1 min in the container. After removing their hand, the research assistant walked the participant to the restroom to wash their hands. After the worms task, all participants answered questions about

Score	0-25	26-50	51-75	75-90	91+
Category	Not at all racist	Not very racist (below average)	Somewhat racist	Racist (needs improvement)	Extremely racist

Figure 2. The chart participants used to interpret their implicit racism scores. Participants ostensibly scored a 31 in the low racism condition and a 97 in the high racism condition.

which task they chose and why. Last, the research assistant informed participants of the true nature of the study, the false nature of the feedback, shredded their score sheet so that their name and score were not visible, and thanked the participant.

Results and Discussion

Many participants were willing to submerge their hand in a squirming pile of worms in order to avoid a reputation as a racist. Participants were more likely to choose to touch the worms in the high racism condition ($M = 30.4\%$) than the low racism condition ($M = 3.9\%$), $F(1, 95) = 13.85$, $p < .001$, $d = .76$; see Table 3 for descriptive statistics).

Participants were concerned that sharing their score would damage their reputation. Participants in the high racism condition ($M = 4.65$, $SE = 0.23$, 95% CI [4.19, 5.12]) were more concerned that sharing their score would damage their reputations than those in the low racism condition ($M = 2.33$, $SE = 0.22$, 95% CI [1.89, 2.77]), $F(1, 95) = 51.96$, $p < .001$, $\eta^2 = .35$. Within the high racism condition, participants who chose to endure the worms ($M = 5.71$, $SE = 0.41$, 95% CI [4.90, 6.53]) were more concerned that sharing their score would damage their reputations than participants who chose not to touch the worms ($M = 4.19$, $SE = 0.27$, 95% CI [3.65, 4.73]), $F(1, 44) = 9.82$, $p = .003$, $\eta^2 = .18$.

Only two participants chose to complete the worms task in the low racism score condition. Both indicated that even their relatively low score was a potential threat to their reputation. Within the low racism condition, people who chose to touch the worms ($M = 5.00$, $SE = 1.00$, 95% CI [2.99, 7.02]) were more concerned that sharing their score would damage their reputation than people who chose not to touch the worms ($M = 2.22$, $SE = 0.20$, 95% CI [1.82, 2.63]), $F(1, 49) = 7.36$, $p = .009$, $\eta^2 = .13$. Thus, even in the low racism condition, participants who touched the worms did so to avoid reputation damage.

Concern about possible damage to one's reputation fully mediated the effect of racism condition on choosing to endure the worms. Participants who were more concerned that sharing their score would damage their reputation were more likely to touch the worms, $B = .095$, $SE = 0.017$, $t(95) = 5.63$, $p < .001$, 95% CI [.06, .13]. PROCESS (Hayes, 2013) was used to calculate the indirect effect of condition on touching worms via concern about reputation from sharing their score. The indirect effect was estimated to be 2.07, $SE = 1.08$, 95% CI [0.90, 4.22] (see Figure 3), with 1,000 bootstrap samples, leaving a nonsignificant direct effect of .82, $SE = 0.90$, $Z = .91$, $p = .36$, 95% CI [−0.95, 2.59]. The proportion of mediated effect (indirect/total) was .716, suggesting that this pathway accounts for about 71.6% of the effect of condition on touching worms.

Most participants found the worms to be repugnant (see Table 4). Participants in both the high racism ($M = 5.54$, $SE = 0.23$) and low racism ($M = 5.45$, $SE = 0.21$) conditions were equally disgusted by the worms, $F(1, 95) = 0.85$, *ns*. Participants in both the high racism ($M = 6.07$, $SE = 0.22$) and low racism ($M = 5.84$, $SE = 0.22$) conditions did not want to touch the worms, $F(1, 95) = 0.50$, *ns*. Participants in the high racism condition ($M = 5.09$, $SE = 0.26$) dreaded touching the worms more than participants in the low racism condition ($M = 4.14$, $SE = 0.31$), $F(1, 95) = 5.55$, $p = .021$, presumably because they were more likely to think they would have to touch the worms.

There were main effects of gender, $F(1, 93) = 5.06$, $p = .027$; condition, $F(1, 93) = 23.75$; and a significant Gender × Condition interaction, $F(1, 93) = 9.76$, $p = .002$, on choosing the worms. In the high racism condition, men ($M = 57.1$, $SE = 0.088$) were more likely than women ($M = 18.8$, $SE = 0.058$) to touch the worms, $F(1, 93) = 13.12$, $p < .001$. However, there was neither a main effect nor an interactive effect of gender on reputation concern, Fs < 1.65, ps > .20. Women and men were equally concerned about their reputations, but women touched the worms less, probably because the women more strongly dreaded touching the worms, $F(1, 95) = 9.90$, $p = .002$.

Limitations. For several reasons, the present results likely underestimate the true proportion of people who would touch worms to avoid reputation damage. Most notably, participants were aware that they were taking part in a scientific experiment, and that the scientists were unlikely to actually harm their reputation. Many participants expressed skepticism that their scores would actually be disseminated or that the scores would damage their reputation if they were shared. (This skepticism was warranted—for ethical reasons we took great pains to shred any possibly damaging paperwork identifying the participants and their scores). In fact, 56% of those participants who chose to share their high racism score did not agree that "I was concerned that sharing my score would damage my reputation." Had they thought it was a credible threat to their reputation, perhaps they would have touched the worms.

Additionally, many participants believed that failing to report their scores violated a social norm to allow open science. Twenty-two percent of the participants in the high racism condition who shared their score considered the norm of sharing

Table 3. Participants' Choices and Ratings of the Worms Task.

Question	High Racism Mean [95% CI]	Low Racism Mean [95% CI]	*F*	*p*
Percentage of participants who touched the worms	30.4 [20.2, 40.7]	3.9 [−5.8, 13.7]	13.85	<.001
The worms are disgusting	5.54 [5.07, 6.01]	5.45 [5.02, 5.88]	0.085	.77
The worms are intriguing	3.09 [2.54, 3.63]	3.76 [3.22, 4.31]	3.13	.08
I want to touch the worms	1.80 [1.37, 2.24]	2.18 [1.73, 2.62]	1.43	.24
I do not want to touch the worms	6.07 [5.62, 6.51]	5.84 [5.40, 6.29]	0.50	.48
I am scared to touch the worms	4.91 [4.41, 5.41]	4.28 [3.74, 4.82]	2.97	.09
I would be grossed out by touching the worms	5.61 [5.16, 6.06]	5.10 [4.57, 5.63]	2.14	.15
I dread touching the worms	5.09 [4.57, 5.60]	4.14 [3.52, 4.75]	5.55	.02
Touching the worms is one of the last things I want to do right now	5.41 [4.85, 5.98]	5.16 [4.59, 5.72]	0.41	.52
This was a difficult choice	3.91 [3.27, 4.56]	2.02 [1.63, 2.41]	26.86	<.001
This was an easy choice	4.11 [3.49, 4.73]	5.86 [5.45, 6.28]	22.92	<.001
I wanted to share my score with the University Community	3.11 [2.53, 3.69]	5.55 [5.12, 5.98]	47.00	<.001
I did not want to share my score with the University Community	5.28 [4.76, 5.81]	2.46 [2.07, 2.85]	76.76	<.001
I wanted to put my hand in the bowl of worms	1.80 [1.47, 2.14]	2.02 [1.60, 2.44]	0.63	.43
I did not want to put my hand in the bowl of worms	6.20 [5.86, 6.53]	5.88 [5.44, 6.32]	1.26	.26
I was concerned that sharing my score would damage my reputation	4.65 [4.16, 5.15]	2.33 [1.91, 2.76]	51.96	<.001

Note. All ratings except for the percentages of choices are 1–7 Likert-type scales labeled from *strongly disagree* to *strongly agree*.

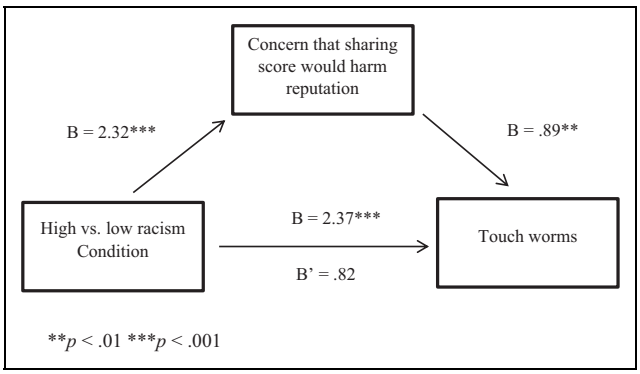

Figure 3. Concern that sharing one's score would harm one's reputation fully mediated the effect of receiving feedback that one is extremely racist on choices to touch worms.

scientific knowledge with the public to be important enough to share their score, even if it showed that they were racist. Had the reputation threat occurred outside of an experiment, some of these participants may have acted to prevent reputation damage. Other participants were willing to flaunt this norm. Three participants, all in the high racism condition, chose to stop the experiment rather than touch the worms or share their scores. These three limitations suggest that the experiment underestimated the number of people who would submerge their hand in worms to avoid reputation damage.

Study 4: Choosing Pain Over Reputation Damage

Method

The methods of Study 4 were nearly identical to those used in Study 3. The main difference was that instead of choosing to touch worms to protect reputation damage, participants could choose a painful task—a cold pressor. This task was described to participants as a pain machine, in which water is kept at just above freezing temperatures. Participants were informed that if they choose to endure the cold pressor, they would submerge their hands in the nearly freezing water until they could no longer stand the pain. Participants were assured that although the cold pressor is very painful, it is safe and would not cause permanent damage. As preregistered (https://aspredicted.org/4eg6n.pdf), we ended the study after one semester ($N = 88$, 55 female). This sample size yields 80% power to detect effects of size $d = .60$.

Results and Discussion

A majority (62.8%) of participants was willing to endure pain in order to avoid a bad reputation. Participants in the high racism condition ($M = 62.8$, 95% CI [50.7, 74.9]) were more likely than participants in the low racism condition ($M = 8.9$, 95% CI [−2.9, 20.7]) to choose the painful task, $F(1, 86) = 40.13$, $p < .001$, $d = 1.37$ (see Table 4 for descriptive statistics). There were no gender differences in choosing to endure pain, $F(1, 86) = 0.029$, $p = .865$, or reputation concern, $F(1, 85) = 0.009$, $p = .925$.

Participants were concerned that sharing their score would damage their reputation. Participants in the high racism condition ($M = 4.55$, $SE = 0.23$, 95% CI [4.09, 5.00]) were more concerned that sharing their score would damage their reputation than participants in the low racism condition ($M = 1.87$, $SE = 0.22$, 95% CI [1.43, 2.31]), $F(1, 85) = 71.51$, $p < .001$, $d = 1.83$. PROCESS (Hayes, 2013) revealed an indirect effect of condition on choice via reputation concern; see Figure 4, B = .87, $SE = 0.59$, 95% CI [0.02, 2.27]. Thus, participants endured physical pain in order to avoid reputation damage. Participants endured the pain for 64 s ($SE = 10$ s) on average and rated the pain they experienced at 5.37 of the 7, $SE = 0.20$.

Table 4. Participants' Choices and Ratings of the Pain Task.

Question	High Racism Mean [95% CI]	Low Racism Mean [95% CI]	*F*	*p*
Percentage of participants who chose the pain task	62.8 [50.7, 74.9]	8.9 [−2.9, 20.7]	40.13	<.001
This was a difficult choice	3.81 [3.33, 4.29]	2.09 [1.63, 2.56]	26.02	<.001
This was an easy choice	4.31 [3.81, 4.81]	5.58 [5.10, 6.06]	13.38	<.001
I wanted to share my score with the University Community	2.88 [2.41, 3.36]	5.40 [4.94, 5.86]	57.66	<.001
I did not want to share my score with the University Community	4.91 [4.41, 5.40]	2.56 [2.07, 3.04]	45.35	<.001
I wanted to put my hand in the cold pressor, that is, pain machine	3.36 [2.78, 3.94]	2.56 [1.99, 3.12]	3.89	.052
I did not want to put my hand in the cold pressor, that is, pain machine	4.50 [3.93, 5.07]	5.44 [4.90, 5.99]	5.69	.019
The cold pressor hurt	5.35 [4.91, 5.78]	5.50 [4.39, 6.61]	0.07	.79
I was concerned that sharing my score would damage my reputation	4.55 [4.09, 5.00]	1.87 [1.43, 2.31]	71.51	<.001

Note. All ratings except for the percentages of choices are 1–7 Likert-type scales labeled from *strongly disagree* to *strongly agree*.

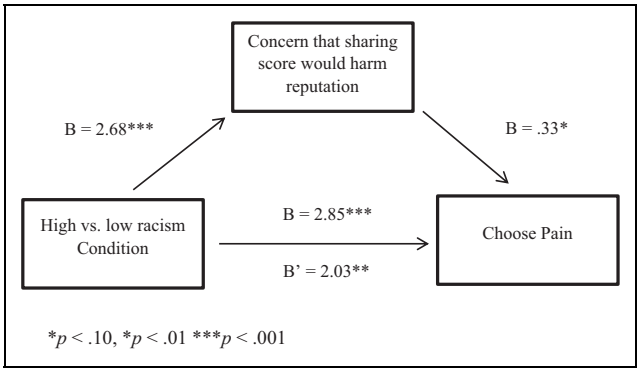

Figure 4. Concern that sharing one's score would harm one's reputation partially mediated the effect of receiving feedback that one is extremely racist on choices to put oneself in pain.

General Discussion

Four studies suggest that many people would go to great lengths to avoid reputation damage. Many people preferred pain, touching disgusting worms, jail time, amputation, and even death, to reputation damage, because they wanted to avoid becoming known as an unsavory individual. Such strong motivations to avoid reputation damage may explain several otherwise puzzling social phenomena. For example, individuals and organizations pay large sums of hush money to keep their indiscretions private. Organizations often offer to allow executives to quit rather than be fired dishonorably. Defendants often fail to take jail-time-saving plea bargains because by doing so they would admit to criminal behavior. People commit suicide rather than face public disgrace and humiliation, even when they are otherwise psychologically healthy (Pridmore & McArthur, 2009).

Our findings suggest that although men and women care approximately equally about maintaining a favorable reputation, they are willing to sacrifice different things to protect it. Women were more willing to sacrifice their dominant hand or their life; men were more willing to touch worms. However, men and women were equally likely to endure physical pain or jail time to protect their reputations, and they both rated reputation protection as approximately equally valuable. Men and women may make different sacrifices, but both genders sacrifice to protect reputation.

Limitations

For ethical reasons, it is difficult to study what people would sacrifice to protect their reputations. Experimenters cannot actually tarnish participants' reputations, nor can we invite participants to behave dangerously so as to avoid reputation damage. Therefore, the present studies used varied methods with different strengths and limitations to test this phenomenon.

A "big data" study found that across 100 countries, people reported valuing their moral reputations more than wealth, excitement, good times, success, and doing things one's own way, and nearly as much as being physically safe. People around the world *say* they value reputation more than almost anything else.

A series of studies found that in making hypothetical decisions, high percentages of people report preferring to incur substantial costs to damaging their reputations. A majority of people even preferred death to acquiring a reputation as a child molester. Thus, *hypothetically*, people will incur extreme costs to protect reputation.

One limitation of using hypothetical choices is that because people are not always good at forecasting their decisions in hypothetical situations (e.g., Hogarth & Makridakis, 1981), it is possible that people would not behave as they report. Two lab studies therefore manipulated reputation threat and observed what people would do to avoid ostensible reputation damage, within the ethical limits of the laboratory. A majority of people chose to endure substantial, but temporary, pain, and 30% of people put their entire hand into a pile of squirming worms—an act that *no* participants did except to protect their reputation.

Moreover, as noted above, some people really do extreme things to avoid reputation damage. They duel, pay hush money, intimidate and kill whistle-blowers, throw acid on disgraced family members, and commit suicide—all to avoid reputation damage. The present research found that ordinary people say reputation is one of their highest values, that they would hypothetically sacrifice their lives to protect it, and that they

actually did highly unpleasant things to avoid ostensible reputation damage. Like Andrew Jackson, dishonored samurai, and acid-throwing honor killers, ordinary people may be capable of doing extreme things to protect their reputations, if necessary.

Some readers may wonder why most people do not actually do these things, if large proportions of people say they would in order to protect their reputations. The most likely explanation is that people do not do extreme things to protect their reputations because they protect them in more common and sensible ways—for the most part, by behaving morally. Most people follow the rules most of the time, even when they could likely violate them and escape unpunished (Fehr & Schneider, 2010). For example, most people cooperate in economic games, even when the "rational" strategy is to play selfishly (Rand, Greene, & Nowak, 2012). Many people cherish being moral as a core part of their identity and therefore act morally to preserve this view of themselves (Aquino & Reed, 2002). Additionally, moral emotions such as empathy and compassion steer most people away from behaviors that would irreparably harm their reputations (Frank, 1988). Fear of retribution, punishment, and reputation damage are still additional factors that motivate people to behave morally (Wright, Caspi, Moffitt, & Paternoster, 2004).

Readers may also wonder: If people care this much about avoiding reputation damage, why do people commit crimes, have affairs, and do other things that can besmirch their reputations? One answer might be that people who suffer reputation damage are not as strongly motivated as most people to protect their reputation. More commonly, however, people who suffer major reputation damage probably failed to foresee the potential damage they could do or failed at self-control. Indeed, presidential candidate Gary Hart once defied the media to catch him engaging in immoral behavior, which they did, and which ended his presidential bid. Self-control failure explains most socially delinquent behavior, and lack of foresight is a major reason why people fail at self-control (Ainslie, 1975; Tangney, Baumeister, & Boone, 2004). People may not always realize when their actions will lead to reputation damage and therefore may not control themselves sufficiently to avoid disgrace. Several participants in the lab studies, for example, believed that they could talk their way out of being seen as racist or that no one would pay attention to the ostensible e-mail. This may have been wishful thinking, especially when social media can be used to rapidly discredit one's character.

Implications

There is a long-standing scholarly debate about the causes of altruism. From an evolutionary perspective, people would generally be expected to behave selfishly, except in certain situations: they might help closely related kin (Hamilton, 1964a, 1964b), they might help others who will help them in return (Trivers, 1971), and they might help others as a way to attract mates (Barclay, 2010). Many researchers have argued, however, that humans are far more prosocial than these limited examples would suggest. As we noted above, humans follow rules even when nobody is watching, they cooperate more often than predicted by economic theories, and they are generally more collegial and collaborative than prior theories have supposed (Fehr, Fischbacher, & Gachter, 2002). One reason for this may be the importance of reputation (Van Vugt, Roberts, & Hardy, 2007). Because reputation is a key to receiving society's benefits, people behave to protect it, even though they could benefit in the short term from cheating others and violating their trust. The possible long-term costs from a sullied reputation far outweigh most benefits from the short-term gains of immoral behavior. Indeed, people are even willing to sacrifice their lives for the sake of reputation.

Our findings provide a new perspective on a widely discussed theory of motivation. Motivation is purported to be hierarchical, with people first satisfying their most fundamental needs before other needs: hunger and other physiological needs, then safety, belongingness, esteem (including reputation), and self-actualization (Maslow, 1943). Maslow recognized that people whose needs are met in the long run can choose to sacrifice basic needs, as when people go on hunger strike, but this caveat is rarely emphasized in discussions of Maslow. Our work suggests that rather than placing reputation within the hierarchy, it is more appropriately seen as a vital part of a cooperative strategy by which people achieve all of the needs on the hierarchy. Because reputation damage can disrupt one's long-term ability to achieve every kind of need, people are sometimes willing to temporarily sacrifice more fundamental needs to preserve reputation. In the long run, preserving reputation enables continued benefits for the self and one's kin, whereas satisfying short-term needs by sacrificing reputation would be very damaging.

Although death might appear the greatest punishment an individual could endure, from an evolutionary perspective, there might be worse punishments. Genes are the currency of evolution, not pleasure, pain, or well-being. If one's bad reputation stains one's family, including one's children, it may lower one's inclusive (genetic) fitness even more than death. If death could therefore restore the reputation of one's lineage, it might be genetically advantageous for an individual to choose death over a destroyed reputation. Although the body will degenerate and eventually perish, an immaterial reputation is potentially immortal. This could explain why many people reported that they would choose death over even posthumous reputation loss. One may be dead, but one's family is not. If reputation is the key that unlocks the benefits of social life for both oneself and one's kin, it should be guarded with the utmost vigilance.

In sum, we found evidence that people will make sacrifices to maintain their reputation. The hypothetical sacrifices were often extreme, including immediate death. Actual behavioral sacrifices included enduring pain and discomfort. Implications for self-concept were largely held constant and cannot explain the findings. Taken together, the present findings indicate that people are profoundly motivated to maintain a reputation as a morally good person, not only during their lives but even after

they die. This motivation is further evidence of the fundamentally social nature of the human self.

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