Research Article

Status Decreases Dominance in the West but Increases Dominance in the East

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Abstract

In the experiments reported here, we integrated work on hierarchy, culture, and the enforcement of group cooperation by examining patterns of punishment. Studies in Western contexts have shown that having high status can temper acts of dominance, suggesting that high status may decrease punishment by the powerful. We predicted that high status would have the opposite effect in Asian cultures because vertical collectivism permits the use of dominance to reinforce the existing hierarchical order. Across two experiments, having high status decreased punishment by American participants but increased punishment by Chinese and Indian participants. Moreover, within each culture, the effect of status on punishment was mediated by feelings of being respected. A final experiment found differential effects of status on punishment imposed by Asian Americans depending on whether their Asian or American identity was activated. Analyzing enforcement through the lens of hierarchy and culture adds insight into the vexing puzzle of when and why people engage in punishment.

The possibility of human cooperation remains an enduring puzzle across the social sciences. Cooperation can emerge naturally between two people through repeated interactions (Axelrod, 1984), but it is much more fragile in larger social units; adding just one more person to a dyad is sufficient to trigger cycles of mutual noncooperation (Fischbacher, Gächter, & Fehr, 2001). Efforts to understand how teams, communities, and institutions manage to sustain cooperation have turned to an important piece of this puzzle: the enforcement of cooperation through punishment. Research using behavioral games has shown that, contrary to standard economic theory, people in many cultures exhibit a natural willingness to punish defectors, even at their own expense (Fehr & Gächter, 2000; Yamagishi, 1986). Yet when and how people use punishment seems to vary markedly across cultures (Herrmann, Thöni, & Gächter, 2008; Wu et al., 2009).

The present research examined cultural differences in how status affects patterns of punishment when punishment is centralized (i.e., when one person is given the sole power to punish others; Baldassarri & Grossman, 2011; O'Gorman, Henrich, & Van Vugt, 2009). Research on punishment in behavioral economics has focused almost exclusively on flat groups with no clear hierarchical differentiation, but such groups are rare: Hierarchies emerge quickly and naturally within groups, creating rank orders of power and status (Leavitt, 2005). Moreover, how people allocate and express power and status is a core dimension of cultural differences (Hofstede, 1980). Examining how hierarchies affect punishment across different cultures is a crucial step toward a richer understanding of cooperation in naturally occurring groups.

Research has shown that having high power (i.e., control over valued resources, such as rewards and punishments; Magee & Galinsky, 2008) tends to promote acts of

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dominance (i.e., actual use of power), typically at the expense of other individuals, because feeling powerful increases disinhibited behaviors (Hirsh, Galinsky, & Zhong, 2011; Keltner, Gruenfeld, & Anderson, 2003). Greater power has been shown to lead people to make more selfish decisions (Blader & Chen, 2012; Dubois, Rucker, & Galinsky, 2015), show less empathy for others (Galinsky, Magee, Inesi, & Gruenfeld, 2006; Van Kleef, De Dreu, Pietroni, & Manstead, 2006), devalue or objectify others to a greater degree (Gruenfeld, Inesi, Magee, & Galinsky, 2008; Kipnis, 1972), and endorse harsher punishment of others (Wiltermuth & Flynn, 2012).

Recent studies have shown that having high status (i.e., respect in the eyes of others on the basis of one's relative rank; Magee & Galinsky, 2008) can counteract these tendencies. First, high status tends to enhance one's sense of self-worth, reducing the need to display dominance to earn others' respect (Fast & Chen, 2009; Fast, Halevy, & Galinsky, 2012). Second, clear hierarchical differences discourage group members from resorting to competitive displays of dominance (Anderson, Ames, & Gosling, 2008; Halevy, Chou, Galinsky, & Murnighan, 2011). Finally, concerns about being respected make people more attentive to the needs and perspectives of others; because status is socially conferred from others, high status leads people to be concerned about how others see them (Blader & Chen, 2012). According to these studies, the royal road to taming the powerful is to make them feel respected.

There are reasons to believe, however, that some of these effects of status are culture-specific and may even reverse outside of Western contexts. It is widely acknowledged that status plays a more integral role in Asian cultures (Hofstede, 1980; Triandis, 1995). One hallmark of the vertical collectivism that characterizes many Asian cultures is the normative acceptance of inequalities within one's group (Triandis & Gelfand, 1998), including conformity to different role or status expectations, even at the expense of individual rights or interests (Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997). In the West, status tends to be viewed as a component of individual identity, but in Asia, status is tied more strongly to one's prescribed place and role within a hierarchy.

Linking social status to vertical collectivism has novel implications for understanding how status affects punishment patterns in different cultures. In individualist cultures, where dominance tends to be viewed in terms of self-interest (Torelli & Shavitt, 2010), having high status can heighten a person's concern that resorting to coercive power may be seen as selfish (Blader & Chen, 2012; Cheng, Tracy, Foulsham, Kingstone, & Henrich, 2013). In contrast, the nature of power and status is quite the opposite in Asian cultures because earning and maintaining respect in these cultures requires using, rather than withholding, power in proportion to one's status (Leung,

Koch, & Lu, 2002; Pye, 1985; Wang & Leung, 2010; Zhong, Magee, Maddux, & Galinsky, 2006). As sinologist Pye (1985) noted, "to exercise power [is] simply to perform high status roles" (p. 22), because Asian collectivism mandates acts of dominance by high-status individuals, not for personal ends but to maintain and reinforce hierarchical relations (Ip, 2009; Weatherley, 2002). As a result, the powerful tend to "conceive of themselves as embodying the collectivity, defending a consensus" (Pye, 1985, p. 53), and as "trying to freeze society into its existing mold" (Pye, 1985, p. 22), whereas exercising power outside formal hierarchies (i.e., without having high status) is considered illegitimate. Hence, the primacy of the collective over individual interests in Asian cultures means that people on the higher rungs are allowed and even expected to use their given power to reinforce and maintain the hierarchy, whereas the use of coercive power that might disrupt the status quo is proscribed for those on the lower rungs.

The Current Experiments

We hypothesized that high status has opposite effects on centralized punishment in the United States and Asia. Figure 1 illustrates our argument. Having high status induces feelings of being respected in the eyes of other individuals, and feeling respected affects punishment in different ways in different cultures. In other words, we predicted that the effect of manipulating status would be mediated by feelings of being respected and then moderated by culture. Our main comparisons, therefore, were between the different status conditions within each culture.

To test our predictions, in Experiment 1 we examined in-group punishment in three-person public-goods games without deception (Fehr & Gächter, 2002); the experiment was conducted in the United States and China. In Experiment 2, participants from the United States and India engaged in third-party punishment (Fehr & Fischbacher, 2004), in which they monitored and punished simulated teammates playing two-person public-goods games. In both experiments, one person in each team was given sole power to punish, and we
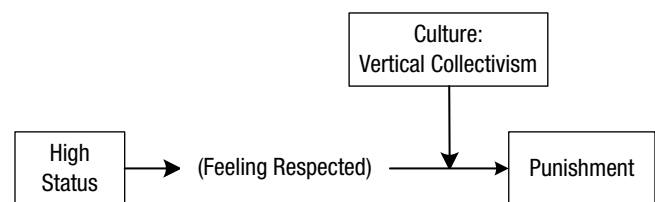
Fig. 1. Illustration of our moderated-mediation model. According to this model, the effect of status on punishment is mediated by feelings of being respected and then moderated by culture. High status leads people in both individualist and collectivist cultures to feel respected, but whether such feelings increase or decrease punishment differs by culture.

manipulated whether that person had high status or not. In Experiment 3, we manipulated the cultural identity of Asian Americans in order to test the causal impact of cultural priming on the use of punishment.

Experiment 1: In-Group Punishment in the United States Versus China

In our first experiment, we examined centralized punishment (O'Gorman et al., 2009) in three-person public-goods games played by participants in the United States and China.

Pretest

To verify that punishment in our paradigm is viewed as dominance in both individualist and collectivist cultures, we presented 53 North Americans and 48 Indians (none of whom participated in the main study) with the public-goods-game scenario that was used in the main experiment (described in detail in the Procedure section) and asked them to indicate how much they perceived the act of assigning deduction points (the form of punishment in this game) as "dominant," "assertive," and "forceful," using a 7-point scale ranging from *disagree completely* to *agree completely*. These items were selected from the Revised Interpersonal Adjective Scales (Wiggins, Trapnell, & Phillips, 1988), an established measure for examining the influence of dominance in group settings (Anderson & Berdahl, 2002). We conducted a one-sample *t* test on the ratings, using 4 (*neutral*) as the reference value.

As predicted, participants in both cultures saw the act of assigning deduction points as dominance; ratings were significantly higher than the neutral point of the scale, whether each item was analyzed separately or a composite measure was used, all ps < .001. There was no difference between North Americans' ($M = 5.33$, $SD = 0.88$) and Indians' ($M = 5.11$, $SD = 0.82$) ratings of dominance, $t(79) = -1.132$, $p = .261$. The two groups saw the act of assigning deduction points as equally dominant. To further confirm that members of both cultures saw punishment as a form of dominance, we examined responses within each culture group. As predicted, both North Americans and Indians rated the act of assigning deduction points as a form of dominance, all ps < .001. These findings demonstrate that punishment in the current public-goods game is seen as a form of dominance not only by researchers but also by lay individuals.[1]

Participants and design

In the main experiment, participants were students from two large, elite universities in metropolitan areas of the United States ($n = 108$, 52% male; mean age = 21.9 years,

$SD = 2.7$) and China ($n = 108$, 45% male, 55% female; mean age = 23.0 years, $SD = 4.03$). They participated for cash payment based on their performance ($4–$15 in the United States, ¥15–¥40 in China). In each country, we decided in advance to run the study until we had 17 to 20 teams in each condition. The American and Chinese participants in the final sample did not differ in age, gender, or years lived abroad, and no participants assigned the role of punisher had lived abroad longer than 3 years. Participants were randomly assigned to 3-person teams in one of two conditions, high status or equal status.

Procedure

The experiment was conducted in behavioral labs at the two universities under comparable conditions. Nine to 15 people were scheduled per session. After arrival, participants were assigned to computer terminals in separate cubicles and directed to a Web site that provided detailed explanation of the experimental tasks, a consent form, and a short quiz that checked their comprehension. All materials were translated and reverse-translated by two bilingual research assistants. Anonymity was maintained throughout the experiment, and no verbal communication was possible between team members.

Status manipulation. After reading the instructions, participants were assigned to teams and conditions;[2] anyone not assigned to a team was given a show-up fee and dismissed at this point. In the *high-status* condition, participants completed a six-item Leadership Aptitude Questionnaire. The questions concerned general attitudes or opinions toward leadership without explicitly mentioning punishment or enforcement (e.g., "Everyone has the capacity to be a leader," "Leadership is about what people do, not who they are"). Ostensibly on the basis of scores from the leadership questionnaire, 1 person in each team was assigned to the role of the sole punisher, "a position of high status that commands a fair deal of respect from workers." This created differences in power and status within the teams. Although the instructions explained that the questionnaire had been used in past research to identify leaders, in reality participants were randomly assigned to the punisher role. Similar manipulations have been used in research on organizational teams and relations (Anderson & Berdahl, 2002; Fast et al., 2012). In the *equal-status* condition, participants completed the same leadership questionnaire (without any pretext for role assignment), and 1 team member was then chosen randomly to be the punisher. This created power differences without assigning status differences a priori. In both conditions, punishers were referred to as "monitors," and participants were reminded in every round that "the monitor, recognized for leadership potential [chosen randomly], is the only one in your team who

can assign deduction points." (Throughout this section, instructions for the equal-status condition are given in brackets.)

Measures of respect, fear, and fairness. After the team and role assignments were made, participants responded to a single item on feelings of respect: "How much do you feel respected or looked up to by your team members for being selected to be the monitor in your group?" (punishers) or "How much do you respect or look up to the member who was selected to be the monitor in your group?" (nonpunishers). The response scale ranged from 1, *not at all*, to 4, *very much*. We used this measure of respect as our mediator to see if the effects of status were indeed driven by feelings of respect in each culture, as people from different cultures might differ in how they respond to assigned status.

Status is often correlated with power. To see if our status manipulation affected status rather than power, which induces fear rather than respect (Cheng et al., 2013), we also asked participants, "How much do you feel feared by your team members [feel fear towards the monitor]?" Finally, because the two methods of selecting punishers (i.e., randomly vs. on the basis of a leadership questionnaire) might affect perceptions of fairness rather than status, we asked participants, "In your opinion, how fair is the selection of the member who can provide deduction points?" Participants responded to both questions on 4-point scales (1 = *not at all*, 4 = *very much*).

Public-goods game with punishment. Participants completed eight rounds of a public-goods game (though they were led to expect 6–12 games). Each round consisted of two stages. First, in the contribution stage, each team member was given an endowment of 20 monetary units (MU) and decided how much of that amount to keep and how much to contribute to a team project. Each MU contributed to the team project yielded 0.5 MU for each member, and thus 1.5 MU for the whole team, whereas keeping 1 MU yielded 1 MU for that member only. Thus, the earnings, π, for member i in the first stage of round t were as follows:

$$\pi_{i,t} = 20 - c_{i,t} + 0.5\sum_{m=1}^{3} c_{m,t}, \qquad (1)$$

where $c_{i,t}$ is i's contribution during round t, and m denotes the members of i's team. After each round, participants learned how much each teammate had contributed.

Next, in the punishment stage, each designated punisher was given an opportunity to punish teammates; this punishment constituted our main dependent variable. Punishment entailed assigning deduction points, p_{im}

(0–10), to another team member, m. Each deduction point cost the punisher 1 MU and the target 3 MU. Thus, the final payoff in round t for player i was as follows:

$$\hat{\pi}_{i,t} = \pi_{i,t} - \sum_{i \neq m}^{3} p_{im,t} - 3\sum_{i \neq m}^{3} p_{mi,t}, \qquad (2)$$

where $3\sum_{i \neq m}^{3} p_{mi,t} = 0$ for punishers and $\sum_{i \neq m}^{3} p_{im,t} = 0$ for nonpunishers. The instructions included a sample round demonstrating payoff calculations; during actual rounds, all calculations were handled by the computer. After the experiment, participants were debriefed, thanked, and paid 5¢ per MU in the United States and ¥0.15 per MU in China.

Results

Punishment. In the United States, the average per-round punishment was lower for high-status punishers ($M = 0.75$ deduction points, $SD = 0.42$) than for equal-status punishers ($M = 1.15$ deduction points, $SD = 0.39$), $t(34) = 2.98$, $p = .005$, $d = 0.99$. In China, however, high-status punishers ($M = 0.86$ deduction points, $SD = 1.58$) did not punish significantly more than equal-status punishers ($M = 0.33$ deduction points, $SD = 0.25$), $t(34) = 1.36$, $p = .18$. Although these results provided preliminary support for our hypothesis, these analyses did not control for repeated measures or contribution levels. Thus, we submitted our data to tobit regression (e.g., Ashley, Ball, & Eckel, 2010), as follows:

$$p_{im,t} = b_0 + b_1\sum_{m=1}^{3} c_{m,t} + b_2 c_{i,t} \\ + b_3(c_{i,t} - c_{m,t}) + b_{4\dots6}\text{treatment}, \qquad (3)$$

where the subscript m indicates the team members, and t is the current round. Thus, $p_{im,t}$ is the deduction points assigned by i to m in round t, $c_{i,t}$ is the contribution by i in round t, and $c_{m,t}$ is the contribution by the target member in round t. Using this model, we estimated the effects of culture (0 = China, 1 = United States), status condition (0 = low, 1 = high), and their interaction (b_4, b_5, and b_6, respectively) on punishment while controlling for the effects of the team's total contribution, b_1; the punisher's contribution, b_2; and the difference in contribution between the punisher and a target, b_3.

This model showed a significant Status Condition × Culture interaction, $b = 2.72$, robust $SE = 1.08$, $p = .01$ (see Table S1 in the Supplemental Material for full regression results), verifying that status had different effects across cultures. The interaction effect was robust to controlling for demographic attributes (i.e., age, sex, ethnic minority,

college major, country of birth, and years lived outside the country of the study). In within-culture regressions, the effect of status condition on average punishment was negative in the United States, $b = -1.22$, robust $SE = 0.35$, $p = .001$, but in the opposite direction in China, $b = 1.40$, robust $SE = 1.02$, $p = .17$, although the latter effect did not reach significance. Overall, these results provided initial support for the divergent effects of status on punishment, controlling for patterns of contributions.

Respect, fear, and fairness. Next, we examined whether feelings of respect might account for these differential patterns. In the United States, punishers in the high-status condition ($M = 2.83$, $SD = 0.71$) felt more respected than those in the equal-status condition ($M = 2.16$, $SD = 0.71$), $t(34) = 2.83$, $p = .008$, $d = 0.94$. Also, nonpunishers reported feeling greater respect toward punishers in the high-status condition ($M = 2.67$, $SD = 0.53$) than toward punishers in the equal-status condition ($M = 2.28$, $SD = 0.61$), $t(70) = 2.86$, $p = .006$, $d = 0.68$. Similarly, in China, punishers in the high-status condition ($M = 2.95$, $SD = 0.71$) felt more respected than those in the equal-status condition ($M = 2.24$, $SD = 0.44$), $t(34) = 3.59$, $p = .001$, $d = 1.20$, and nonpunishers reported feeling greater respect toward punishers in the high-status condition ($M = 2.79$, $SD = 0.53$) than toward punishers in the equal-status condition ($M = 2.38$, $SD = 1.02$), $t(70) = 2.17$, $p = .03$, $d = 0.51$. There were no experimental effects of the status manipulation on fear or fairness reported by punishers or nonpunishers in the United States or China, all ps > .11. These results demonstrate that our status manipulation induced feelings of respect toward punishers successfully without varying perceptions of punishers' dominance or the fairness of their selection.

Moderated mediation. Next, we used structural equation modeling (Preacher, Rucker, & Hayes, 2007) to test for the hypothesized moderated mediation (i.e., Feeling Respected × Culture interaction; Fig. 1). The full model (Table 1) showed a significant interaction between culture and feelings of being respected, $b = -1.89$, robust $SE = 0.53$, $p < .001$, as well as main effects of feeling respected, $b = 1.21$, robust $SE = 0.43$, $p = .005$, and culture, $b = 1.11$, robust $SE = 0.51$, $p = .031$. The main effect of status condition was not significant, $b = -0.24$, robust $SE = 0.47$, $p = .61$. Our bootstrap analysis (5,000 resamples) revealed significant mediation within each country: $b = -0.85$, bias-corrected 95% confidence interval (CI) = [−1.49, −0.34], in the United States and $b = 1.52$, bias-corrected 95% CI = [0.96, 2.08], in China. Notably, the effects were in opposite directions, demonstrating divergent effects of respect across these cultures. Thus, assigning high status induced feelings of being respected in each culture, but with contrasting effects on punishment.

Alternative explanations. An alternative explanation for these results is that the Chinese punishers felt the need to punish more in the high-status condition because the Chinese are somehow less responsive to punishment from high-status punishers than to punishment from equal-status punishers. This would suggest lower, rather than greater, conformity to role expectations in China than in the United States. To test this possibility, we examined the marginal effect of punishment on contributions in each condition and country by regressing change in a nonpunisher's contributions from round t to round $t + 1$ on punishment received in round t, respect toward the punisher, and their interaction. Only in China, and only in the high-status condition, did the interaction of punishment received and respect have a significant and positive effect on the next contribution, $b = 0.23$, robust $SE = 0.09$, $p = .007$ (Table S3 in the Supplemental Material). This suggests that the Chinese were more, not less, responsive to punishment from high-status punishers the more they respected those punishers.

It could also be argued that, particularly in an individualist culture like the United States, high status reduces punishment by making punishers feel more self-interested or entitled to maximize their earnings; hence, the low level of punishment by high-status punishers in the United States may have arisen from a desire to minimize their own expenses rather than from feeling

Table 1. Results of Structural Equation Models Predicting Feelings of Being Respected and Punishment per Round in Experiments 1 and 2

Predictor	Experiment 1: United States vs. China ($N = 1,152$)	Experiment 2: United States vs. India ($N = 5,016$)
Outcome variable: feeling respected		
Status condition (0 = equal status, 1 = high status)	1.16*** (0.28)	0.60** (0.17)
Constant	−2.94*** (0.79)	−0.81** (0.30)
Outcome variable: punishment per round per target		
Status condition (0 = equal status, 1 = high status)	−0.24 (0.47)	−0.11 (0.35)
Feeling respected	1.21** (0.43)	0.79** (0.23)
Culture (1 = United States, 0 = Asia)	1.11* (0.51)	−0.85* (0.33)
Feeling Respected × Culture	−1.89*** (0.53)	−1.04** (0.36)
Constant	0.63 (1.27)	0.08 (0.68)
Log likelihood	−2,202.31	−8,579.40

Note: Ratings of feeling respected were standardized. Robust standard errors are given in parentheses.
*p < .05. **p < .01. ***p < .001.

respected. If so, however, high-status punishers in the United States should have contributed less than equal-status punishers or nonpunishers. Neither pattern was found in a censor regression in which individual contribution per round was regressed on status condition, controlling for rounds as fixed effects and for repeated measures using robust standard errors clustered at the individual level, both *ps* > .31. A similar argument is that high status may have invoked concerns about the fairness of having to pay for punishment out of one's own pocket. As reported earlier, however, our manipulation checks revealed no difference between conditions or countries in the perception of how fair the leadership selection was.[3]

Discussion

Experiment 1 showed that assigning high status decreased punishment in the United States but not in China, revealing an interaction effect of status and culture. Notably, this effect was mediated in each country by feelings of being respected, which had opposite effects on punishment among Americans and among Chinese.

Experiment 2: Third-Party Punishment in the United States Versus India

Given that we did not use simulated actors in Experiment 1, it is possible that our econometrics did not fully control for various interdependencies and unobserved factors. To isolate punishers' behavior more carefully, in Experiment 2 we used a third-party punishment paradigm (Fehr & Fischbacher, 2004) in which simulated teammates played a two-person public-goods game while the punisher simply monitored and punished them. We recruited Indian participants to test whether our results would generalize to another vertical-collectivist culture. Finally, we measured vertical collectivism to test the causal mechanism more directly.

Participants and design

We recruited 75 American and 75 Indian volunteers from Amazon Mechanical Turk, aiming for roughly 30 to 35 participants per condition in the final sample. The experiment was described as a study on virtual teams. Participants were promised $3 to $5, according to their final earnings, in exchange for 25 to 35 min of their time. Fifteen Americans and 3 Indians were dropped from analyses because they were not Caucasian or not born and raised in the United States or India. The final sample consisted of 60 Americans (48.3% male, 51.7% female; mean age = 37.67 years, *SD* = 12.10) and 72 Indians (61.1% male, 38.9% female; mean age = 30.81 years,

SD = 8.98). All participants played the role of the punisher and were randomly assigned to one of two conditions: high status versus equal status.

Procedure

Participants were directed to a Web site, where they read instructions explaining that each participant would complete multiple rounds, or "weeks," of work (the public-goods game) in a team of three, consisting of two workers and one monitor. All participants were actually assigned to the monitor (i.e., punisher) role; workers were simulated, and their contributions were programmed to be constant across conditions.

Vertical-collectivism measure. Participants first completed a battery of questions, including the 16-item individualism-collectivism scale by Singelis, Triandis, Bhawuk, and Gelfand (1995). This scale included our measure of vertical collectivism. Reliability of the 4-item subscale on vertical collectivism was high, α = .81.

Status manipulation. Next, participants completed the six-item Leadership Aptitude Questionnaire from Experiment 1 and were assigned to one of two conditions. In the *equal-status* condition, they were told that they had been randomly chosen to be the monitor and therefore had "the same status and rank as the workers." In the *high-status* condition, they were told that they had been chosen to be the monitor on the basis of their responses to the leadership questionnaire.

Respect measure and manipulation checks. Next, participants were asked, "How high status is your assigned role compared to the workers?" (1 = *very low*, 4 = *very high*) and "How much do you feel respected for being selected to your role?" (1 = *very disrespected*, 4 = *very respected*). As in Experiment 1, we also asked, "How fair do you feel about how the monitor was selected?" and "How much do you feel feared by your teammates?" (same response scale as in Experiment 1).

Third-party punishment. Participants completed 19 rounds of the public-goods game (though they were led to expect 15–26 rounds) in their assigned group. In each round, the two workers decided how many hours (0, 10, or 20) to work on team projects that benefited the whole team and how many hours to work on personal projects that benefited only themselves (for a total of 20 hr); the workers' decisions were preprogrammed (see the Supplemental Material). The payoff to each worker, participants were told, was determined jointly by the two workers' decisions, and was based on Equations 1 and 2, adjusted for there being two workers and

with a multiplier of 0.75. Our main dependent variable was the level of punishment (deduction points assigned by the monitor).

In third-party punishment, unlike the in-group punishment paradigm used in Experiment 1, punishers do not participate in the contribution stage; they participate only in assigning deduction points, in the second stage. Thus, the three-person public-goods game becomes a two-person game. This feature allowed us to simulate workers and isolate the confounding effects of cooperation on punishment better than we could using the econometric approach taken in Experiment 1, as well as to test whether the effects observed in Experiment 1 would generalize to out-group punishers.

Results

Punishment. Americans assigned marginally more punishment per round in the equal-status condition (M = 1.52 deduction points, SD = 1.41) than in the high-status condition (M = 0.99 deduction points, SD = 0.62), $t(58)$ = 1.94, p = .056, d = 0.50. In contrast, Indians punished more in the high-status condition (M = 2.15 deduction points, SD = 1.66) than in the equal-status condition (M = 1.20 deduction points, SD = 1.03), $t(70)$ = 2.96, p = .004, d = 0.70. To control for repeated measures and censoring (because punishment was zero-inflated and could not go below 0 or above 10 deduction points), we again conducted tobit regression using status condition (0 = low, 1 = high), culture (0 = India, 1 = United States), and their interaction to predict deduction points; the unit of analysis was punishment opportunity, and the model included fixed effects for rounds and robust standard errors clustered for each individual punisher. Using this model on the pooled sample, we obtained main effects of status condition, b = 1.03, SE = 0.48, p = .03, and culture, b = 2.16, SE = 1.15, p = .06, which were qualified by a significant Status Condition × Culture interaction, b = −2.06, SE = 0.68, p = .002. Analyzing each culture separately, we found a negative effect of status condition on punishment in the United States, b = −1.12, SE = 0.49, p = .02, but a positive effect in India, b = 1.02, SE = 0.47, p = .03. Thus, status had different effects on punishment in the United States than in India (see Table S5 in the Supplemental Material for full regression results).

Respect measure and manipulation checks. In the United States, participants in the high-status condition identified their position as higher in status (M = 2.97, SD = 1.03) than did participants in the equal-status condition (M = 2.18, SD = 1.12), $t(58)$ = 2.84, p = .006, d = 0.73. They also reported feeling more respected (M = 2.81, SD = 0.93, vs. M = 2.25, SD = 0.75), $t(58)$ = 2.55, p = .013, d = 0.66. Similarly, Indian participants in the high-status

condition identified their position as higher in status (M = 3.00, SD = 0.94) compared with Indian participants in the equal-status condition (M = 2.15, SD = 1.18), $t(70)$ = 3.32, p = .001, d = 0.79, and also reported feeling more respected than did Indian participants in the equal-status condition (M = 2.88, SD = 0.93, vs. M = 2.10, SD = 1.14), $t(70)$ = 3.13, p = .003, d = 0.74. In contrast, we found no differences in fear or perceived fairness by condition or country, all ps > .20.

Moderated mediation. Next, we tested for moderated mediation using structural equation modeling. In the full model (Table 1), the interaction between culture and feelings of being respected was significant, b = −1.04, robust SE = 0.36, p = .004. We also found significant effects of feeling respected, b = 0.79, robust SE = 0.23, p = .001, and culture, b = −0.85, robust SE = 0.33, p = .011. As expected, status condition did not have a significant effect, b = −0.11, robust SE = 0.35, p = .76. A bootstrap test with 5,000 resamples revealed a statistically significant indirect effect of feeling respected in each culture. In the United States, the indirect effect was negative, b = −0.15, bias-corrected 95% CI = [−0.27, −0.06]. In contrast, the indirect effect was significant in the positive direction in India, b = 0.47, bias-corrected 95% CI = [0.37, 0.59]. Thus, high status produced feelings of being respected that tempered the tendency to engage in punishment among Americans, whereas Indian participants were more likely to use punishment the more they felt respected. These findings reveal divergent effects of status and respect in the United States and India and replicate the results of Experiment 1.

Vertical collectivism. Finally, we examined whether vertical collectivism can account for the effect of culture. As expected, Indians' scores for vertical collectivism (M = 5.03, SD = 1.02) were higher than Americans' (M = 4.59, SD = 1.20), $t(130)$ = 2.28, p = .02, d = 0.40.[4] Next, we replaced culture with vertical collectivism (standardized) in the structural equation model predicting punishment. The interaction between feelings of being respected and vertical collectivism was positive and significant, b = 0.32, SE = 0.16, p = .047. A bootstrap test with 5,000 replications also revealed significant mediation by this interaction, b = 0.19, bias-corrected 95% CI = [0.07, 0.22]. We found no significant effect of scores on the other subscales of the individualism-collectivism scale, all ps > .12. These results provide strong evidence that the cultural differences in the effects of status on punishment were due at least in part to vertical collectivism.

Meta-analysis across Experiments 1 and 2. To establish the size and significance of the effects of status on punishment across the two studies, we conducted a

random-effects metaregression using standardized mean differences in average punishment per round. Results confirmed that high status had opposite effects in the United States and Asia. The meta-analytic effect of high status on punishment was negative in the United States, $b = -0.92$, $SE = 0.13$, $p = .02$, but positive in Asia, $b = 1.52$, $SE = 0.16$, $p = .01$. In sum, across the first two studies, having high status, rather than equal status, led punishers from the United States to punish less. In contrast, having high status led punishers from more collectivist cultures to punish more.

Discussion

Experiment 2 replicated the main results from Experiment 1. High status tended to decrease punishment in the United States, but increased punishment in India. Furthermore, in both countries, these patterns were mediated by feeling respected. We also found evidence that these cultural differences can be attributed to vertical collectivism, which is consistent with recent work showing different effects of status and power in different cultures (Chen & Welland, 2002; Miyamoto & Wilken, 2010; Torelli & Shavitt, 2010). These results demonstrate the robustness of our initial findings in several ways. First, we used a different punishment task. Second, we used participants from another culture to show that the effects are not specific to one country. Finally, our meta-analysis confirmed that high status significantly increased punishment in China and India but decreased it in the United States.

Experiment 3: Manipulating Culture

Because culture was not manipulated in Experiments 1 and 2, we cannot rule out the possibility that unobserved between-country differences might be responsible for the effects we found. To address this issue, we recruited Asian Americans and activated either their Asian or their American cultural identity to see if high status would increase or decrease their use of punishment. We also used a paradigm with costless punishment to eliminate incentives to withhold punishment, so that we could determine whether our results would generalize across different forms of punishment.

Participants and design

We recruited 200 Asian Americans from Amazon Mechanical Turk, aiming to have 40 to 50 participants per condition. Individuals who were not Asian American were screened out using a demographic survey. Participants were offered $1.50 to complete a vignette study. Pretesting indicated that the study took about 8 min to complete, and the instructions stated that respondents who completed it in less than 4 min would be disqualified from payment. On the basis of this attention check, 24 respondents were dropped, which left 86 in the equal-status condition and 90 in the high-status condition; including the dropped participants did not change our results. Overall, 59% of the final sample were men, and 41% were women; the mean age of the sample was 28.8 years ($SD = 7.44$). By ethnicity, 41% of participants were East Asian (Chinese, Korean, Taiwanese, Japanese), 26% were Southeast Asian (e.g., Vietnamese, Filipino), 29% were South Asian (e.g., Indian, Pakistani, Nepalese), and 5% were of mixed or other ethnicities.

Participants were randomly assigned to conditions in a 2 (status condition: high, equal) × 2 (cultural identity: American, Asian) design.

Procedure

Cultural-identity manipulation. To manipulate participants' cultural identity, we asked them to list two or three ways in which they identified with their American or their Asian culture.

Status manipulation. Next, participants were asked to imagine that they were new employees of a company:

> Last week, your boss put together a team of four, including you and three other new employees, to work on a new project. The other three are all Asian [American], around your age, and the same gender as you. . . . To make sure that your team functions effectively, your boss needs to assign someone to be the Project Manager. The main responsibility of the manager is to monitor each member's effort and productivity to make sure your team is on track each week.

In the *equal-status* condition, the vignette indicated that the boss then drew straws in front of the team and randomly assigned the participant to be the manager, who would have "additional responsibilities, but roughly the same status and rank as the teammates." In the *high-status* condition, the vignette stated that the participant was chosen to be the manager because of his or her "technical expertise and managerial competence" and that this position had "high status that commands a fair deal of respect from teammates and the boss." To reinforce these manipulations, we asked participants to spend a minute writing about a specific work situation in which they had worked with people of equal status ("who had roughly the same level of experience and competence as you") or of lower status (who "looked up to you, deferred to your

opinion, or respected you for your experience or competence"; procedure taken from Bowles & Gelfand, 2010).

Punishment. Finally, participants were asked how much they agreed with the following statement: "As manager of this team, I am willing to punish teammates if they are lazy or uncooperative." The response scale ranged from 1 (*disagree completely*) to 7 (*agree completely*). Exercising punishment was thus costless in this study.

Results

A 2 (status condition: high, equal) × 2 (cultural identity: American, Asian) analysis of variance predicting willingness to punish revealed a significant Status Condition × Cultural Identity interaction, $F(1, 172) = 5.41$, $p = .02$, $\eta_p^2 = .03$. Controlling for age, gender, or ethnicity did not affect the significance of this effect. Participants primed to identify with Asian culture reported greater willingness to punish in the high-status condition ($M = 5.25$, $SD = 1.25$) than in the equal-status condition ($M = 4.50$, $SD = 1.68$), $t(90) = 2.45$, $p = .016$, $d = 0.51$. In contrast, participants primed with American culture did not express greater willingness to punish in the high-status condition ($M = 4.81$, $SD = 1.44$) than in the equal-status condition ($M = 5.05$, $SD = 1.23$), $t(82) = 0.82$, $p = .42$, $d = 0.18$.

Discussion

Experiment 3 demonstrates that priming culture can alter the effects of status on punishment. When participants' Asian identity was activated, high status increased their willingness to punish. Unexpectedly, activating their American identity did not have a significant effect on their willingness to punish. Nevertheless, the predicted interaction was significant; the effects of status depended on which cultural identity was activated.

General Discussion

This research examined cultural differences in how status affects the enforcement of cooperation in hierarchies. We found that high status decreased punishment by centralized (i.e., powerful) punishers in the United States but increased punishment by centralized punishers in Asia, which suggests that the nature of power can differ across cultures; the socialized nature of power in Asia (Torelli & Shavitt, 2010) means that acts of dominance are tied to status in different ways than they are in the United States. Because status is linked more closely to self-worth and individual identity among Americans and more closely to one's place in a hierarchy among Asians, having high status reduced the need to display coercive power in the

United States but promoted the use of power to reinforce the existing social order in Asia.

The results of Experiment 2 suggest that vertical collectivism—normative acceptance of one's place and responsibilities in an existing social order—may explain our results. Vertical collectivism is more common across Asia than in the United States, where the vast majority of recent research on power and status has taken place. Although the idea that status matters more in Asian cultures is not new (Triandis, 1995), our research demonstrates that status can have qualitatively different effects across cultures.

Finally, our results support our moderated-mediation model, in which the different effects of status across cultures are mediated by feelings of being respected. Thus, the divergent patterns of punishment that we observed among participants in the high-status conditions were not a direct consequence of their simply occupying high-status positions. Rather, these patterns were driven by the feelings of respect that accompany high-status positions. This result not only distinguishes the psychology of status from its structural properties, but also underscores the crucial idea that status can have different effects across cultures because cultures can differ in what it means to be respected. Among collectivists, respect is given to those who exercise their power to preserve the social order. Among individualists, respect is earned by those who withhold their power.

Our experiments contribute to multiple lines of research. First, we have demonstrated that high status has opposite effects on acts of dominance in cultures that differ in vertical collectivism. This finding helps qualify the recent literature on hierarchy (Gruenfeld & Tiedens, 2010; Magee & Galinsky, 2008), which has focused on Western contexts. Second, we have integrated the psychology of status and power with the behavioral economics of cooperation to shed light on why people engage in punishment. Compared with strategic and emotional explanations (e.g., Carpenter & Matthews, 2009; de Quervain et al., 2004), explanations based on the motives of power and status have received far less attention.

We are not the first to show that status has different effects in different cultures. Park et al. (2013) found, for instance, that high status increases expressions of anger in Japan, but decreases these expressions in the United States. To our best knowledge, however, we are the first to examine cultural differences in how status affects the enforcement of cooperation in hierarchies. Future work should explore whether these cultural differences generalize to other forms of dominance.

Finally, our research adds to the growing voice questioning the common misperception that equates the Asian ideal of harmony with conflict avoidance (Leung

et al., 2002). According to Lun (2012), "harmony [in Asia] is better understood as the need to maintain relations in a hierarchical social structure, rather than [as the need] for seeking smooth relations with others" (p. 474). Among collectivists, dominance by individuals with high status seems to be an important basis of such harmony.

Author Contributions

K. Kuwabara developed the study concept. All authors contributed to the study design. Testing and data collection were performed by K. Kuwabara, S. Yu, and A. J. Lee. K. Kuwabara and A. D. Galinsky drafted the manuscript; A. J. Lee and S. Yu provided revisions. All authors approved the final version of the manuscript for submission.

Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

Supplemental Material

Additional supporting information can be found at http://pss .sagepub.com/content/by/supplemental-data

Notes

1. It should be noted that dominance does not necessarily imply antisocial behavior. Dominance as a form of enforcement can be either prosocial or antisocial.
2. We also ran a baseline condition in which every member of each team was given no status assignment (equal status) and was given power to punish (equal power). A description of this condition and analyses of the data are available in the online Supplemental Material.
3. An additional study tested self-interest and fairness motives as alternative explanations and did not find support (see the Supplemental Material).
4. Compared with the American participants, the Indian participants were also higher in horizontal collectivism ($M = 4.88$, $SD = 1.31$, vs. $M = 4.36$, $SD = 1.47$), $t(130) = 2.15$, $p = .03$; lower in vertical individualism ($M = 4.45$, $SD = 0.80$, vs. $M = 4.83$, $SD = 0.83$), $t(130) = 2.61$, $p = .01$; and lower in horizontal individualism ($M = 4.70$, $SD = 0.95$, vs. $M = 5.02$, $SD = 0.77$), $t(130) = 2.07$, $p = .04$.

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