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BRIEF REPORTS

A Bumpy Train Ride: A Field Experiment on Insult, Honor, and Emotional Reactions

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The present research examined the relationship between adherence to honor norms and emotional reactions after an insult. Participants were 42 Dutch male train travelers, half of whom were insulted by a confederate who bumped into the participant and made a degrading remark. Compared with insulted participants with a weak adherence to honor norms, insulted participants with a strong adherence to honor norms were (a) more angry, (b) less joyful, (c) less fearful, and (d) less resigned. Moreover, insulted participants with a strong adherence to honor norms perceived more anger in subsequent stimuli than not-insulted participants with a strong adherence to these norms. The present findings support a direct relationship among insult, adherence to honor norms, and emotional reactions.

Keywords: emotions, honor, insult, field experiment

Several societies in the Mediterranean area of Europe and the southern United States have been described as “honor cultures” (Caro Baroja, 1965; D. H. Fischer, 1989; Nisbett & Cohen, 1996; Pitt-Rivers, 1965, 1977; Rodriguez Mosquera, Manstead, & Fischer, 2000). Honor refers to people’s value both in their own eyes and in the eyes of others, and a distinctive feature of honor cultures is the extent to which one’s personal worth is determined interpersonally (Miller, 1993; Nisbett & Cohen, 1996; Rodriguez Mosquera et al., 2000; Stewart, 1994). Whereas an individual’s personal worth is important in both honor and individualistic cultures, the role of social esteem in determining one’s personal worth is more important in honor cultures than in individualistic cultures.

Research has shown that, compared with individuals from individualistic cultures, those from honor cultures attach more importance to family-related values and social recognition (A. H. Fischer, Manstead, & Rodriguez Mosquera, 1999). Furthermore, it has been shown that such values are more important in honor cultures than in other cultures in shaping the experience and expression of emotions like pride, shame, and anger (Rodriguez

Mosquera et al., 2000). For example, in cultures where honor is more salient, attacks on one’s honor, as in the case of insults, appear to be a common anger-eliciting event. Moreover, the elicitation of anger in attacks on one’s honor usually leads to hostility and retaliation against the perpetrator as a way of restoring one’s honor (Cohen & Nisbett, 1994, 1997; Cohen, Nisbett, Bowdle, & Schwarz, 1996; Nisbett & Cohen, 1996; Stewart, 1994). The southern United States has been regarded as a prime example of an honor culture in which affronts are met with violent retribution. It has been argued that adherence to honor norms might explain the observation that the American south is more violent than the American north (Cohen, 1996; Nisbett & Cohen, 1996). For instance, Southerners are more likely to agree that violence is acceptable in defense of home and family and as a mechanism of social control; consequently, they are more likely to endorse violence as a response to an affront. In honor cultures, “even small disputes become contests for reputation and social status” (Cohen et al., 1996, p. 945); thus, individuals are expected to defend their honor or reputation, even if this means that they have to fight or kill for it (Nisbett & Cohen, 1996; Pitt-Rivers, 1965).

In an intriguing series of experiments, Cohen et al. (1996) found support for their hypothesis that White males reared in the southern United States react differently to an affront than those reared in the north. Compared with Northerners, who were relatively unaffected by an insult, Southerners were (a) more likely to think that their masculine reputation was threatened, (b) more upset, (c) more physiologically and cognitively primed for aggression, and (d) more likely to engage in aggressive and dominant behavior. Cohen et al. suggest that participants’ strength of adherence to honor norms is the underlying mechanism for these effects. That is, Southerners are argued to have a stronger adherence to honor norms than Northerners and, consequently, react stronger and more aggressively to an affront.

In their research, Cohen et al. (1996) compared the emotional reactions toward an affront of Southerners with those of North-

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eners in terms of a cultural mechanism based on inner representations such as a script. The script in a cultural of honor, for example, as described by Cohen and Gelfand (2006), prescribes how an individual is to act when insulted. Indeed, Cohen et al. demonstrated that the cultural script concerning honor of Southerners and Northerners contains important differences. However, although scripts are essential to understanding cultural mechanisms, G. R. Smith and Semin (2004) suggested that individuals do not merely rely on scripts to perform action *B* when situation *A* occurs. To further comprehend such cultural mechanisms, one should examine an individual's values as to how to cope with situation *A* at the moment of occurrence.

The fact that norms in Cohen et al. (1996) were not directly measured precludes establishing a direct relation among an insult, adherence to honor norms, and emotional reactions. In the present research, we aimed at providing empirical support for this direct relation. Using a field experiment, we intended to show that, after an insult and compared with individuals with a weak adherence to honor norms, individuals with a strong adherence to these norms react differently. Moreover, these different emotional reactions should be moderated by differences in the strength of adherence to honor norms. These anticipated findings would provide an important contribution to existing findings on the relation between honor and emotions.

In our research, we modified Cohen et al.'s (1996) experimental set-up, in which a confederate bumps into an unsuspecting participant and insults him, in two important ways. First, we measured participants' strength of adherence to honor norms. Second, we used a field setting to stage the study in more ecologically natural circumstances. Moreover, we examined the effect of an insult on both participants' immediate emotional reactions and their perception of hostility in subsequent stimuli. We assessed participants' emotional reactions by observing their facial expressions and body language after an insult and expected that participants with strong adherence to honor norms would be more likely to express emotional responses indicating aggression and hostility; that is, they would appear (a) more angry, (b) less joyful, (c) less fearful, and (d) less resigned. Subsequently, participants' perception of hostility in subsequent stimuli was assessed via a face-rating task, in which they had to indicate which emotion was being expressed in a series of photographs of emotional and neutral faces and how intensely this emotional expression was. This procedure allowed us to examine whether, after an insult, participants with a strong adherence to honor norms will perceive more hostility (a) in neutral stimuli, (b) in all stimuli, or (c) only in stimuli that also involve an affront or challenge.

Method

Participants and Design

A total of 42 male train travelers (mean age = 30.90 years, $SD = 15.80$) participated in the study on a voluntary basis. Participants were assigned to the experimental (insult) condition or control (no insult) condition according to a rule that was established before the experiment commenced: Of all male participants who entered, every other (odd number) participant was insulted ($n = 21$), whereas the remaining participants were not insulted.¹

Materials and Procedure

The experiment was conducted on a local train on the Amsterdam–Rotterdam track (± 70 km). Confederates served as observers or insulters and were seated in different parts of one compartment of the train. The two observers each faced opposing ways and switched positions throughout the experiment. Both observers could hear everything participants said and could read their body language (although from different perspectives). Two male confederates of similar height and weight served alternatively as insulters. None of the confederates were fully aware of the purpose of the study. Participants were train travelers who entered the local train at different stops between Amsterdam and Rotterdam. One of the two observers signaled when a participant was approaching. Subsequently, a confederate stood up, bumped into the participant, and added: “Hey, watch it!” (*Hey, kijk eens uit joh!*).² Immediately after the bumping incident, the observers rated the participants' emotional reactions on a 7-point scale (1 = *not at all*, 7 = *very much*). Both observers rated how angry, irritated, joyful, happy, nervous, fearful, and resigned participants appeared.

After participants were seated, they were asked to complete several questionnaires. First, they answered several demographical questions. Second, participants' adherence to honor norms was assessed by asking them to what extent they agreed with nine items (1 = *do not agree at all*, 7 = *totally agree*) extracted from Rodriguez Mosquera, Manstead, and Fischer's (2002) honor questionnaire. These items included questions about family honor, respect, reputation, and humiliation in public (e.g., “My honor is my reputation”).³ Finally, participants were given a face-rating task in which they were asked to indicate which emotion was being expressed in a series of four photographs. For each of the four photographs, participants were asked to choose one of six options (happiness, sadness, anger, fear, surprise, or disgust) and to indicate the intensity of the expression on a 5-point scale (1 = *not at all strong*, 5 = *very strong*). Stimuli were black-and-white photographs of emotional and neutral faces taken from the Karolinska Directed Emotional Faces set (KDEF; Lundqvist, Flykt, & Öhman, 1998). These photographs were morphs of facial photographs of 37 different males expressing the same emotion: anger (KDEF code: MANS), sadness (MSAS), fear (MAFS), or neutral (MNES).

¹ From each condition, 1 additional participant declined to participate in the experiment. Also, 3 participants indicated that their religious affiliation was Islam, whereas the majority were Christians or nondenominational (similar to national averages). Combined with confederates' observations of participants, we were fully assured that there were not more than 3 nonnative Dutch participants. We included these participants in our analysis because the results were equivalent with or without them. None of the participants was aware of the relationship between the insult and the experiment.

² To prevent the situation from becoming too hostile, confederates refrained from using the offensive term “asshole” (*klootzak*) as used in Cohen et al.'s (1996) study. Confederates were also instructed to continue walking after the incident to minimize contact between him and the participant and not to challenge the participant any further.

³ We only chose nine items because we wanted to keep our questionnaire as short and concise as possible (in light of the short duration of participants' average train ride). Items 2, 7, 9, 11, 14, 17, 20, 24, and 26 were extracted from Rodriguez Mosquera et al.'s (2002) 27-item honor questionnaire on the basis of their relevance to the present research.

Table 1
Estimated Means for Emotional Reactions for Low- and High-Honor Participants

Emotional reaction	Low honor	High honor	t_{simple}	t_{partial}
Anger	3.48 (3.62)	5.99 (5.98)	3.37***	3.61***
Fear	3.79 (3.78)	2.61 (2.48)	1.89*	2.24**
Joy	3.52 (3.36)	1.84 (1.85)	-2.61**	-2.83**
Resignation	5.06 (5.27)	3.89 (3.91)	-1.59	-2.37**

Note. Least square estimated means for 1 *SD* above (high honor) and 1 *SD* below (low honor) the honor scale sample mean. Values in parentheses are the estimated means for the average age. $t_{\text{simple}} = t$ test and statistical significance for the univariate regression with the corresponding emotional reaction as a dependent variable. $t_{\text{partial}} = t$ test and significance of the same regression with participant age effect held constant.

* $p < .10$. ** $p < .05$. *** $p < .001$.

After all questions were completed, participants were thoroughly debriefed and the insulter apologized to the individuals he insulted. Participants assigned to the control condition completed the same procedure without being insulted (see Appendix A for more details of our experimental set-up).

Results

Adherence to Culture-of-Honor Norms

A principal-component analysis on the nine honor items extracted one factor with an eigenvalue of 5.55 (all other eigenvalues < 1), explaining 61.6% of the variance.⁴ Participants' scores on the nine items were averaged to obtain a score for their adherence to honor norms (Cronbach's $\alpha = .92$). There was no significant difference between conditions on adherence to honor norms, $F(1, 31) < 1.00$, $p = .82$, suggesting that self-perception of emotional reactions in relation to honor norms is unlikely to account for the obtained results.

Emotional Reactions

Observers' ratings of emotional reactions⁵ were averaged to obtain a measure of emotional reactions.⁶ Ratings of anger and irritation were averaged to obtain a measure of anger ($\alpha = .92$), ratings of joy and happiness were averaged to obtain a measure of joy ($\alpha = .86$), and ratings of fear and nervousness were averaged to obtain a measure of fear ($\alpha = .85$). Resignation was assessed with a single rating.⁷

To estimate the relation between adherence to honor norms and emotional reactions, we first analyzed the entire set of reactions with a general linear model with the four reactions as dependent variables, type of emotion as repeated measure factor, adherence to honor norms as a continuous independent variable, and participants' age as a covariate variable. Age was included because emotional reactions may vary across age, introducing uninteresting variance. Results showed a significant main effect of type of emotion, $F(3, 36) = 6.50$, $p = .001$, $\eta^2 = .32$, which simply indicates that participants, on average, showed less joy ($M = 2.53$) and fear ($M = 3.15$) than anger ($M = 4.67$) and resignation ($M = 4.57$). More interesting, there was an interaction between type of emotion and adherence to honor norms, $F(3, 36) = 10.53$, $p < .001$, $\eta^2 = .47$, indicating that participants with different levels of adherence to honor norms showed a different pattern of emotional reactions (Table 1). Univariate regressions showed that participants with a strong adherence to honor norms appeared significantly more angry, $t(13) = 3.61$, $p = .001$, $B = 0.91$, with

$Sr = .64$; less fearful, $t(13) = -2.24$, $p = .05$, $B = -0.45$, with $Sr = .54$; less joyful, $t(13) = -2.84$, $p = .025$, $B = -0.62$, with $Sr = -.54$, and less resigned, $t(13) = -2.38$, $p = .01$, $B = -0.48$, with $Sr = -.45$, after being insulted than participants with a low adherence to honor norms.⁸ Thus, after an insult and compared with participants with a weak adherence to honor norms, participants with a strong adherence to honor norms displayed more facial expressions and body language indicating aggression and hostility.

Perceived Hostility

In analyzing participants' responses to emotional faces, we first checked whether accuracy of classification of the faces was different for different emotions, across conditions (insult vs. no insult), and across different levels of adherence to honor norms. Upon establishing no influence of the latter two variables on the accuracy level, we tested whether the perceived intensity of the emotion displayed by the picture was influenced by condition and adherence to honor norms. For the sake of completeness, we also tested perceived intensity on correctly identified faces. In these analyses, we did not include neutral faces because neither accuracy

⁴ Despite the small sample size, the analyses complied with all the requirements (only one factor extracted, high communalities; $n > 25$) that, according to Preacher and MacCallum (2002), guaranteed reliable factor structures in small samples.

⁵ All analyses controlled for differences between the two insulters. There was no effect of insulter on anger, $t(15) = 1.55$, $p = .15$, nor was there an effect of insulter on resignation, $t(15) < 1.00$, $p = .92$. There was an effect, however, of insulter on fearfulness, $t(15) = 4.20$, $p < .05$, $B = 0.85$.

⁶ All emotional reactions were obtained after the bumping incident, because no comparable set opportunity existed that could be used to measure emotional reactions in the control condition.

⁷ Correlations for observers' judgments were .71 for anger, .38 for fear, .38 for resignation (all $ps < .05$, one-tailed), and $-.02$ for joy (*ns.*). This lack of agreement for joy may be explained by the situation (being insulted), in which joy was not appropriated and in fact, showed a low mean ($M = 2.50$) and variance ($SD = 1.24$).

⁸ One might well be concerned with the physical condition of the participant in relation to the insult. However, there was no effect of participant's height on anger, $t(15) < 1.00$, $p = .67$, resignation, $t(15) < 1.00$, $p = .78$, and fearfulness, $t(15) < 1.00$, $p = .35$. There was, however, an effect of height on joyfulness, $t(15) = 2.26$, $p < .04$, $B = 0.12$, $Sr = .50$. Our subsequent analyses controlled for this effect.

of classification nor perceived intensity can be interpreted for faces showing no emotion.

Emotional faces were generally identified correctly except for the fearful face, which was classified as showing surprise by half of the sample. Accuracy levels for insulted participants were 94%, 50%, and 89% for the angry, fearful, and sad faces, respectively, compared with 94%, 35%, and 94%, respectively, for not-insulted participants. We analyzed the influence of condition (insult vs. no insult) and adherence to honor norms on the accuracy (correct vs. incorrect) of classification for angry, fearful, and sad faces using a generalized linear model (Firth, 1991; Nelder & Wedderburn, 1972) and the generalized estimating equations (GEE) method (Liang & Zeger, 1986) to account for correlated responses. Essentially, we ran a logistic regression with accuracy as the dependent variable; adherence to honor norms, condition, and type of emotional face as independent variables; and type of emotional face as a repeated measure factor.⁹ Results showed that accuracy changed across type of emotional face. In particular, participants were less accurate in classifying fearful faces than angry ($Z = 3.10$, $p = .002$) and sad ($Z = 2.11$, $p = .03$) faces. The analysis yielded no significant effect of adherence to honor norms concerning condition and its interaction with type of emotional face.

After establishing that the key variables of our study did not affect the accuracy of classification of the faces into the correct emotion category, we analyzed the perceived intensity of the emotions displayed in the picture. To study the effects of adherence to honor norms on perceived intensity, we used a general linear model with adherence to honor norms, condition (insult vs. no insult), and their interaction as independent variables; intensity scores as the dependent variable; and type of emotional face (angry, fearful, sad) as the within-participant factor. This model allows testing the overall effects and possible differential effects of the independent variables across different emotional faces. Both the independent variables were centered before the interaction was computed (Aiken & West, 1991). The analysis yielded no statistically significant difference between insulted participants and not-insulted participants, $F(1, 27) < 1$, $p = .33$; no overall effect of adherence to honor norms, $F(1, 27) < 1$, $p = .66$; and no overall interaction, $F(1, 27) = 3.09$, $p = .09$. However, more importantly, the analysis demonstrated a statistically significant three-way interaction among condition, adherence to honor norms, and type of emotional face, $F(2, 54) = 4.61$, $p = .01$, $\eta^2 = .15$. This



Figure 1. Mean perceived intensity of an angry face for 1 *SD* above (high honor) and 1 *SD* below (low honor) the honor scale sample mean at the two levels of experimental manipulation (insult vs. no insult).

Table 2
Perceived Intensity of Faces as Presented and Correctly Classified

Emotional face	Low honor		High honor	
	No insult	Insult	No insult	Insult
Angry	3.41 (3.42)	3.03 (2.40)	2.41 (3.10)	3.80 (3.60)
Sad	2.99 (2.94)	3.55 (3.34)	3.40 (3.20)	3.32 (3.42)
Fearful	3.33 (4.12)	2.58 (1.40)	2.17 (2.55)	3.02 (2.38)

Note. Least square estimated means for 1 *SD* above (high honor) and 1 *SD* below (low honor) the honor scale sample mean at the two levels of experimental manipulation (insult vs. no insult). Values in parentheses are the estimated means only for participants who correctly classified the face.

interaction indicates that the interaction between adherence to honor norms and condition is different for different emotional faces. To probe the three-way interaction, we performed a regression analysis with adherence to honor norms, condition (insult vs. no insult), and their interaction as independent variables for each type of emotional face. In regard to the angry face, we found a statistically significant interaction of adherence to honor norms and condition, $t(27) = 2.61$, $p = .014$, $B = 0.62$, with $Sr = .43$, and no linear effects. Simple slope analysis (Aiken & West, 1991) showed that insulted participants with a strong adherence to honor norms (1 *SD* above the mean) perceived the angry face as angrier than not-insulted participants with a strong adherence to honor norms, $t(27) = 2.62$, $p = .021$, $B = 0.31$, with $Sr = .43$. No statistically significant difference was found between insulted and not-insulted participants with a weak adherence to culture-of-honor norms (1 *SD* below the mean; Figure 1), $t(27) = 1.38$, $p = .43$. Finally, as further support of our hypothesis, there was a significant positive relation between adherence to honor norms and perception of anger in the angry face after an insult, $t(27) = 2.06$, $p = .020$, $B = 0.35$, with $Sr = .57$. No statistically significant result was found in the no-insult condition, $t(27) = -1.41$, $p = .18$. In regard to responses to fearful faces, we found no linear effects and a weak interaction between honor norms and condition, $t(27) = -2.04$, $p = .050$, with $Sr = .36$. Although the pattern of estimated intensity of the fearful face is suggestive (Table 2), the overall regression model was not significant, $F(3, 27) = 1.58$, $p = .22$, and a subsequent simple slope analysis showed a nonsignificant effect of adherence to honor norm in both the insult condition and the no-insult condition. Accordingly, we refrain from interpreting this result. No effect was found of the independent variables on responses to a sad face.

Finally, we repeated the previous analyses of perceived intensity for each type of emotional face only for participants who perceived

⁹ We fit the logistic model with SAS PROC GENMOD, defining a binomial distribution for the dependent variable and a logistic link function. The within-participant effect was emotional face (angry, sad, and fearful), which was modeled using a compound-symmetry covariance matrix (cf. Liang & Zeger, 1986). Because of the presence of many zeros in the complete cross-tabulation of the independent and dependent variables, we could not fit the full model. We fit a submodel with all the main effects and the interaction between emotional face and condition (insult vs. no insult).

the face as displaying the correct emotion.¹⁰ In regard to the angry face, a regression with adherence of honor norms, condition (insult vs. no insult), and their interaction as independent variables was conducted on the 30 participants who perceived the face as displaying anger. Coherent with previous analyses, the model yielded a significant interaction between adherence to honor norms and condition, $t(26) = 2.09$, $p = .046$, $B = 0.52$, with $Sr = .34$, and no linear effect. No significant effects were found for perceived intensity of correctly classified sad faces and fearful faces.

Discussion

The present research investigated the relations between adherence to honor norms and emotions. Using a field experiment among train travelers, we examined the effect of an insult and adherence to honor norms on people's immediate emotional reactions and on their perception of hostility in subsequent stimuli.

Our research is the first to show a direct relation among insult, adherence to honor norms, and immediate emotional reactions, thereby extending previous research in important ways. First, the present results show that, after an insult, individuals with a strong adherence to honor norms differed greatly in their emotional reactions from individuals with a weak adherence to honor norms. The former individuals were rated by observers as angrier but less fearful, less joyful, and less resigned than the latter. In previous research, Cohen et al. (1996) obtained inconsistent findings concerning observed emotional reactions of insulted Southerners and Northerners, leading them to comment that "the results of Experiment 1 regarding anger and amusement must be treated with caution until subsequent research replicates the findings of Experiment 1 in ecologically natural circumstances" (p. 951). The present findings provide an elegant replication and extension of Cohen et al.'s findings in a real-world context.

On the basis of Cohen et al.'s (1996) theory, it is expected that individuals with a strong adherence to honor norms would be less resigned and less fearful after an insult than those with a weak adherence to honor norms. Our present findings are the first to provide empirical support for this hypothesized relation between adherence to honor norms and the experience of fear and resignation.

Previous research found significant differences in emotional reactions after an affront between men reared in the southern versus the northern United States. Cohen et al. (1996) suggested that these findings are traceable to differences in the strength of adherence to honor norms, because the northern and southern United States differ significantly in ascribing to these norms. However, their findings were not supported by a direct assessment of the strength of adherence to honor norms, thereby precluding the establishment of a direct relation among insult, adherence to honor norms, and emotional reactions. By incorporating a direct measure of strength of adherence to honor norms in our field experiment, we were able to establish this direct relation and demonstrate that stronger adherence to honor norms leads to more aggressive and hostile responses after an affront.

Furthermore, our present findings are the first to show that insulted individuals with a strong adherence to honor norms perceive more hostility in subsequent stimuli than not-insulted individuals with a strong adherence to honor norms. The former were more likely to perceive angry faces as angrier than the latter. The finding that this difference in perceived hostility was only found

for angry faces suggests that individuals with a strong adherence to honor norms do not perceive neutral stimuli as more hostile or perceive more hostility in all stimuli, but they only perceive more hostility in those stimuli that involve an affront or challenge. This can be related to findings of Cohen et al. (1996), who found that an insult did not create a generalized hostility but rather hostility toward specific situations that concerned issues of honor.

Why do people with a strong adherence to honor norms react more hostile after they have been insulted? The most promising answer to this question may be derived from appraisal theories (Frijda, 1986; Roseman, 1984; Scherer, 1984; C. A. Smith & Ellsworth, 1985). According to the universal contingencies hypothesis, people from different cultures will experience similar emotions if they appraise a situation in the same way, whereas they will experience different emotions if they appraise a situation differently (Ellsworth, 1994; Scherer, 1997). This hypothesis implies that cultural differences in the emotional experiences may be explained by differences in appraisals. Cohen et al.'s (1996) findings regarding the different emotional reactions of individuals from honor and nonhonor cultures may be attributed to differences in their appraisals concerning the "bumping incident." The present findings contribute to previous research and to the universal contingencies hypothesis by suggesting that individuals with a strong adherence to honor norms may perceive the situation as more unexpected, more unpleasant, more obstructing their goals, or more unfair. Evaluating the situation more strongly in terms of these appraisals is likely to amplify anger and hostility (see, e.g., Roseman, Wiest, & Swartz, 1994; Scherer, 1997).

Our present findings concerning both immediate emotional reactions and subsequent perception of hostility may also be explained by an argument made for cultural salience; that is, some type of events or stimuli may be seen as especially relevant in some cultures but not others (cf. Mesquita & Ellsworth, 2001). For instance, certain kinds of events or stimuli may be more salient to members of some cultures than others and so are more likely to be noticed, appraised, and reacted to. Frijda and Mesquita (1994) suggested that in cultures in which honor is a strong value people are extremely sensitive to events that enhance or diminish their honor. They refer to these situations as focal events, or events that "never remain unnoticed" in a culture, and that when they occur "the individual can hardly escape being emotionally affected" (p. 71). Our research thus further contributes to the existing literature, because these events "never remain unnoticed" not merely to individuals from honor cultures but also to those adhering highly to honor values. In a country where honor is not the salient cultural mechanism, differences we obtained in emotional reactions may result from individuals with a strong adherence to honor norms being more likely to notice events and stimuli that may signal disapproval.

Conclusion

The present research demonstrates that adherence to honor norms is an important predictor of emotional reactions after an

¹⁰ We did not fit the full model with emotion as a repeated measures factor because only 11 participants were accurate for all emotional faces. This very small sample size would drastically reduce the power of the model.

insult. Individuals with a strong adherence to these norms can react more aggressively and hostile after an affront. This could imply that these individuals respond to an insult with violent payback. Moreover, individuals with a strong adherence to honor norms also perceive more aggression and hostility in subsequent relevant stimuli. This could imply that these individuals perceive the person who insults them as more aggressive, which may make an appraisal of hostile intent of the affront more probable. Both possible consequences may, separately or together, lead to a stronger escalation of honor-related issues. Research on honor may provide important insights on important societal issues, such as honor-based aggression and revenge.

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Appendix

Experimental Set-up

The experiment was conducted in a train from Amsterdam to Rotterdam. Dutch trains do not allow for people to walk next to each other; hence, confederates did not factor in whether participants were accompanied or not. The experiment was conducted outside of peak hours in the Dutch railroads’ “Koploper,” a train with a hallway approximately 30 m long (approximately 98 feet). The length of the train permitted the confederates to complete subsequent bumps out of sight of the preceding participants. Careful measures were also taken to limit effects of social context on participants. For example, participants were also out of sight of other train travelers who witnessed the bump when completing the questionnaire.

Confederate instructions. All confederates were thoroughly instructed. Hans IJzerman was also in proximity of the confederates, in the unlikely case the situation should escalate. Moreover, he also debriefed participants thoroughly. All confederates were informed on how to handle the situation in case any direct conflict might occur. The following are the different instructions confederates received before embarking on the train.

Insulter instructions. “When one of the face raters signals you, you are to stand up, turn around, and bump the participant slightly.

After the bump, you are to say, 'Hey, kijk eens uit joh!' ('Hey, watch it!') and keep walking in order not to escalate the situation. After the bump, you will be signaled by the person handing out the questionnaires to sit down out of sight of the previous participant. After the previous participant completed the questionnaire, you are to apologize to this participant and explain this was part of an experiment."

Face-rater instructions. "You will watch the door for participants. When a participant enters the train and walks toward the door, you are to signal the insulter. After the insult, you will watch the participant's emotional response and rate this on a scale from 1 to 7."

Instructions for handing questionnaires. "After the participant has been insulted, wait until he sits down. Then approach him and ask him whether he will be willing to complete two questionnaires: a demographic questionnaire related to a marketing study conducted by the Vrije Universiteit Amsterdam for the Dutch railroads and a questionnaire by a fellow Psychology Department student on the moods of train travelers. Ostensibly, these studies are conducted together in order to save you and your friend time."

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Correction to Engelmann and Pessoa (2007)

In the article "Motivation Sharpens Exogenous Spatial Attention" by Jan B. Engelmann and Luiz Pessoa (*Emotion*, 2007, Vol. 7, No. 3, pp. 668–674), the supplemental materials link is as follows:
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