## TRIGGERING HUMILIATION

Understanding the Role of the Perpetrator in Triggering Humiliation: The Effects of Hostility and Status

Saulo Fernández\*

Eran Halperin \*\*

Elena Gaviria\*

Rut Agudo\*

Tamar Saguy \*\*

\*Universidad Nacional de Educación a Distancia (UNED)

\*\*Interdisciplinary Center (IDC) Herzliya

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Address correspondence to Saulo Fernández, Department of Social and Organizational Psychology, UNED, C/ Juan del Rosal, 10, 28040 Madrid, Spain. E-mail: <a href="mailto:saulo@psi.uned.es">saulo@psi.uned.es</a>

**Abstract** 

The present research addresses the question of whether two characteristics of the

situation (the hostility of a perpetrator and his/her status vis-à-vis the target) are critical

in triggering humiliation (versus shame and anger). In Study1, participants described an

autobiographical episode that elicited either humiliation, shame, or anger. Humiliation

episodes were coded (by independent raters) as particularly unjust situations in which a

hostile perpetrator (more hostile than perpetrators of the anger episodes) forced the

devaluation of the target's self. In Studies 2 and 3, we manipulated the perpetrator's

hostility and his/her status vis-à-vis the target. Consistent with our hypotheses, both

hostility and high status contributed to elicit humiliation, albeit hostility turned out to

have a much stronger effect on triggering humiliation than high status. Moreover, our

results clarified the cognitive process underlying the effect that these two factors had on

humiliation: hostility triggered humiliation via the appraisal of injustice, whereas high

status triggered humiliation via the appraisal of internalizing a devaluation of the self.

*Keywords:* humiliation, hostility, self-conscious emotions, shame, status.

# Understanding the Role of the Perpetrator in Triggering Humiliation: The Effects of Hostility and Status

Humiliation has been defined as a self-conscious emotion of particularly high intensity that arises when a person is unjustly demeaned or put down (Fernández, Saguy, & Halperin, 2015; Ginges & Atran, 2008; Klein, 1991; Leidner, Sheikh, & Ginges, 2012; Otten & Jonas, 2014). Recent work has identified two core appraisals underlying the emotional experience of humiliation, namely, appraising being the target of an unjust devaluation and internalizing such devaluation (Fernández et al., 2015). Internalizing an unjust devaluation of the self appears, however, to be a quite counterintuitive—almost paradoxical—psychological process. If we appraise that others are unjustly devaluating us, why do we not simply reject such devaluation?

We propose that the answer to this question lies, to a great extent, in the presence of external factors that trap the victims in the humiliating situation, forcing them to internalize the unjust devaluation. Among these situational determinants is the perpetrator—the person who causes the humiliation. The main objective of the present research is to study the role that the perpetrator plays in the humiliating dynamics. Our basic premise is that, in order to compel somebody to internalize an unjust devaluation of the self, the perpetrator needs some type of power, force, or influence over the victim's self. Although there are different factors that may provide a perpetrator the capability to humiliate the victim, in the present research we focus on two of these factors, namely: hostility and status.

Understanding the role that the hostility and the status of the perpetrator play in triggering humiliation is important, not only to learn about the unique nature of humiliation, but also to better understand ordinary experiences of humiliation. Indeed, workplace mobbing or school bullying or, in general, any instance of harassment that

takes place in our everyday lives, are behaviors that imply the hostility of a perpetrator against a victim and for which the status relationship between victims and perpetrators is relevant (Salmivalli, 2010; Saunders, Huynh, & Goodman-Delahunty, 2007). However, little is known about the emotional consequences that such episodes of harassment have on the victims, even though harassment is often related to humiliation (Elison & Harter, 2007).

In the present research we posit, first, that a devaluation coming from a hostile perpetrator can be particularly humiliating, because a hostile perpetrator can critically contribute to enhance the injustice appraisal that underlies the emotional experience of humiliation (Fernández et al., 2015). Indeed, humiliation has been often associated with hostile and violent interpersonal or intergroup interactions (Ginges & Atran, 2008; Jonas, Otten, & Doosje, 2014; Lindner, 2006). Moreover, Elison and Harter (2007) found that hostile intent in the form of being laughed at and mocked was, together with the presence of an audience, the key predictor of when participants believe they would feel humiliated. However, to the best of our knowledge, no research has tested in the laboratory the isolated role of hostility in triggering humiliation nor has identified the underlying cognitive process that explains why hostility may trigger humiliation.

Second, with regard to status, we posit that a high-status perpetrator can facilitate the experience of humiliation, because the target can more easily internalize a devaluation coming from a high-status perpetrator than a devaluation coming from a low-status perpetrator. Status, understood as the relative position that a person holds in the social hierarchy, has been pointed out as an emotionally relevant factor, particularly regarding emotions that are especially important to the social domain, such as pride, shame, or anger, among others (Steckler &Tracy, 2014). Research in this area has shown, for instance, that expressions of shame are perceived as communicating low

status (Shariff & Tracy, 2009). Recent cross-sectional studies showed the existence of a substantial correlation between low social rank and shame (Wood & Irons, 2016), and between low economic status and shame (Bosma, Brandts, Simons, Groffen, & van den Akker, 2015). Moreover, there is evidence about low-status group members perceiving high-status outgroup members to be better judges of the competencies necessary for success in society (Vorauer & Sakamoto, 2008). These perceptions could award high-status perpetrators with a significant influence over the self-concepts of low-status targets. It seems likely therefore that status can contribute to the appraisal of internalizing a devaluation of the self and, in turn, trigger humiliation.

The main hypothesis that drives the present research is therefore that the perpetrator's hostility toward the victim and his/her status vis-à-vis the target would act as situational factors triggering humiliation. In particular, we posit that each of these factors (hostility and status) would influence humiliation via a different pathway, each involving a core appraisal underlying the emotional experience of humiliation: hostility would affect humiliation via the "injustice channel," since a hostile devaluation would be appraised as particularly unjust, which in turn would elicit humiliation, whereas status would affect humiliation via the "internalization channel," as a devaluation coming from a high-status perpetrator would be more easily internalized by the victim.

A second important goal of the present research is to deepen our knowledge of how humiliation differs from shame and anger. Humiliation lies within the "family" of emotions that imply a perceived devaluation of the self. Given that shame is a dominant emotion in that category (Elison & Harter, 2007), understanding how humiliation differs from shame is important for gaining knowledge of the complex particularities of humiliation as an emotional experience. We propose that the role that a perpetrator plays in eliciting these two emotions (i.e., humiliation and shame) is a key aspect that

critically differentiates them. In this regard, although humiliation and shame share the core appraisal of internalizing a devaluation of the self (Fernández et al., 2015), in humiliation the devaluation is perceived as *forced* externally by a perpetrator, whereas in shame, the person who feels the emotion considers him/herself responsible for the actions that cause his/her own devaluation (Ferguson, Brugman, White, & Eyre, 2007; Tangney & Dearing, 2002) — we therefore posit that no perpetrator is needed to force the devaluation of the self in shame, whereas the perpetrator is consubstantial to the experience of humiliation.

With regard to the differences and similarities between humiliation and anger, we suggest that a perpetrator who acts against the target plays a similar role in these two emotional experiences. In both humiliation and anger, a hostile perpetrator would trigger the emotion via the injustice appraisal. Therefore, the key difference between humiliation and anger would not lie in the presence of a perpetrator nor in his/her hostility toward the target, but in whether the actions of this perpetrator pervade the victim's self, forcing the target to internalize a devaluation of the self. To this respect, the perpetrator's status would constitute an important difference between humiliation and anger, as for humiliation a high-status perpetrator who forces the internalization of the hostile devaluation would be particularly important, whereas for anger the perpetrator's high status would be less determining in triggering the emotion. Indeed, experiences and expressions of anger have been associated with high status of *the target* vis-à-vis the perpetrator (Steckler & Tracy, 2014), whereas we posit that humiliation would be more likely if the inverse relationship exists, that is, if the target has lower status than the perpetrator.

To test these hypotheses we carried out three studies. First, to establish the role of a perpetrator (any perpetrator) in eliciting humiliation, as well as to study the

characteristics this perpetrator typically has, we analyzed autobiographical texts whose authors described situations in which they felt either humiliation, shame, or anger. Two independent raters evaluated these texts, to not only determine whether there was a perpetrator present in the episode, but also—where present—to evaluate the extent to which s/he acted with hostility toward the protagonist and had high status vis-à-vis him or her. In the second study we used the imagined-scenario method (Scherer, 1987), asking participants to imagine an academic setting in which an evaluator, who had assessed an essay they had previously written, strongly devalued their work. This evaluator varied in the hostile tone he used toward participants and in his status vis-àvis them. We measured the key appraisals of humiliation (i.e., injustice and internalization) and the target emotions (i.e., humiliation, shame, and anger); we tested the hypothesized dual channel toward humiliation and the hypothesized differences and similarities between humiliation, shame, and anger. Finally, in the third study, we increased the ecological validity of our procedure replicating Study 2 with participants (who were all psychology students) going through an actual devaluating situation adapted from Harmon-Jones and Sigelman (2001).

## Study 1

In Study 1, we asked two independent raters to assess autobiographical episodes describing situations in which their protagonists (the participants) had felt either humiliation, shame, or anger. Raters evaluated whether there was a perpetrator in the episodes. When present, raters assessed the extent to which the perpetrator acted with hostility and had a high status vis-à-vis the protagonists.

#### Method

**Participants.** Participants were  $150^2$  undergraduate students at the National University of Distance Education, UNED, in Spain (126 females, 24 males;  $M_{age}$ =33.58

years,  $SD_{age} = 10.01$ ) who received course credit for their participation. All participants were recruited before conducting the analysis.

**Procedure**. The study was conducted online. Participants were randomly assigned to either the humiliation (N=49), shame (N=57), or anger (N=44) condition, and were instructed to briefly describe a situation or episode in their lives in which they felt the given emotion<sup>3</sup>. Two raters, blind to our objectives and hypotheses, read each episode and rated it according to the measures described below.

**Measures.** The two raters completed a short questionnaire for each text assessing, first, whether there was or not a perpetrator in the situation (we clarified that by a "perpetrator" we meant a person or group that harmed the protagonist, either physically or morally, intentionally or unintentionally). Then, if there was a perpetrator, the raters assessed the extent to which he/she a) acted with cruelty and hostility against the victim, and b) had a high status vis-à-vis the victim (we clarified that by high status we understood social prestige in the context of the described situation). We additionally asked raters to assess the extent to which the protagonist of the episode c) was a victim of injustice, and d) suffered a devaluation of the self. All dimensions included in the questionnaire were measured with single Likert-type items (e.g., "The perpetrator had a high status in comparison to the protagonist"), except the first question about the presence of a perpetrator, which was dichotomous (yes/no), and the one referring to the devaluation of the self, which was measured by the following three items: "In the described situation, the target... 1) has reasons to believe that his/her self-esteem is threatened; 2) is perceived negatively in the eyes of others; 3) is perceived negatively in his/her own eyes." All Likert items ranged from 1 ("not at all") to 7 ("extremely"). The items used to assess the extent to which the protagonists were victims of injustice and suffered a devaluation of the self included also a "not applicable" answer option. In line

with the American Psychological Association (APA) ethical standards, all measures, manipulations, and exclusions in this and in the rest of the studies included in the paper are reported.

#### Results

The Cohen's kappa between the scores of the two raters on the question "Is there a perpetrator in the situation?" was k(150) = .77, p < .001, indicating a high inter-rater reliability. More in particular, both raters agreed about the presence of a perpetrator in 93 (62%) of the episodes, and about the absence of a perpetrator in 41 (27%) of the episodes; in total, they agreed in 89% of the cases. In 16 (11%) episodes, the raters disagreed in assessing the presence of a perpetrator. These 16 episodes were excluded from all the analyses involving the perpetrator (i.e., analyses about the presence of a perpetrator across conditions and those about hostility and status), but were included in the rest of the analyses (i.e., those regarding injustice and devaluation of the self).

In line with our hypothesis, both raters identified the presence of a perpetrator in 92% of the humiliation episodes. As expected, the presence of a perpetrator was a key difference between the humiliation and shame episodes, as only 17% of the shame episodes involved a perpetrator. A Mann-Whitney test indicated that the difference in the proportion with which raters identified the presence of a perpetrator across the humiliation and shame conditions was statistically significant, U = 284, p < .001, r = .76. However, the presence of a perpetrator was common to humiliation and anger, with 86% of the anger episodes involving a perpetrator. The difference in the proportion between the humiliation and anger episodes was nonsignificant, U = 885, p = .201, r = .14.

To analyze the differences between humiliation, shame, and anger in the assessed dimensions, we first calculated the mean of both raters' scores on each

dimension across conditions, and then we ran an ANOVA by condition on each dimension, followed up by post-hoc tests, when necessary. Because the presence of a perpetrator was characteristic only of humiliation and anger episodes, we focused the analyses that involved the characteristics of the perpetrator (i.e., status and hostility) exclusively on the comparison of the conditions that were characterized by a perpetrator (i.e., humiliation versus anger), excluding the shame condition from these analyses<sup>4</sup>. For the analyses that involved the core appraisals of humiliation (i.e., injustice and devaluation of the self), we compared the three conditions and took into account all episodes, including those in which no perpetrator was present, as, theoretically, a person could be a victim of injustice and face a devaluation of the self without a perpetrator causing the situation (e.g., when one is a victim of an accident).

Given that we had meaningful pairings between two and only two raters, we calculated the Pearson's correlation between the scores of the two raters on each measured dimension to assess the inter-rater reliability (IRR) (Landers, 2015). All IRR coefficients were higher than .70, with the exception of the one corresponding to devaluation of the self, which was r(148) = .63, p < .001. The average IRR was .76, indicating a high inter-rater reliability. Table 1 shows the bivariate correlations between the assessed dimensions (i.e., hostility, status, injustice, and devaluation of the self).

The results of the ANOVA on hostility yielded a significant main effect of condition, F(1,83) = 21.16, p < .001,  $\eta_p^2 = .21$ , with significantly higher levels of hostility in the humiliation (M = 6.06, SD = 1.14) than in the anger condition (M = 4.45, SD = 1.99). The results on status tended to statistical significance, F(1,83) = 2.13, p = .149,  $\eta_p^2 = .03$ , but did not reach significance level. However, the mean's difference in perpetrator's status across the humiliation (M = 3.23, SD = 2.30) and the anger (M = 3.23).

2.53, SD = 2.08) conditions followed the expected pattern, with higher perpetrator's status in humiliation than in anger<sup>5</sup>.

The result on injustice yielded a significant main effect of condition, F(2,147) = 74.50, p < .001,  $\eta_p^2 = .51$ . A Tukey post-hoc test indicated that the raters assessed the protagonists of the humiliation condition to experience significantly higher levels of injustice (M = 5.99, SD = 1.39) than the protagonists of both the shame (M = 1.90, SD = 1.80) and the anger conditions (M = 4.63, SD = 2.06), ps < .001. The level of injustice was also significantly higher in the anger as compared to the shame condition (p < .001). The result on experiencing a devaluation of the self also yielded a significant main effect of condition, F(2,148) = 9.20, p < .001,  $\eta_p^2 = .11$ . The Tukey post-hoc test indicated that the raters assessed the protagonists of the humiliation condition to experience significantly higher levels of self-devaluation (M = 4.95, SD = 1.08) than the protagonists of both the shame (M = 4.34, SD = 1.36, p = .035) and the anger conditions (M = 3.84, SD = 1.30, p < .001). The difference in the level of self-devaluation between the shame and the anger conditions tended to statistical significance, but did not reach significance level (p = .12).

## **Discussion**

These results provide preliminary support for our hypotheses, but also showed that the hostility of the perpetrator was a more determinant characteristic of the humiliating situations than his/her high status. As expected, our results showed that situations that trigger humiliation typically involve a perpetrator. The presence of a perpetrator is an important difference between humiliation and shame, as situations that trigger shame do not typically involve a perpetrator. In this regard, humiliation resembled anger, as situations that trigger anger also involve a perpetrator who behaves hostilely against the protagonist. Importantly, though, the perpetrators in humiliating

situations were particularly hostile against their victims, more hostile than the perpetrators in situations that trigger anger. The perpetrators in the situations that trigger humiliation also tended to have higher status vis-à-vis the victim than the perpetrators of the situations triggering anger, albeit this difference did not reach statistical significance. Moreover, in line with previous findings about the cognitive appraisals underlying humiliation (Fernández et al., 2015), the protagonists of situations triggering humiliation suffered particularly high levels of injustice and self-devaluations, higher than the protagonists of situations triggering shame or anger.

In the next series of studies, we manipulated the level of hostility and the status of the perpetrator in the laboratory, and measured the key appraisals involved in our hypotheses, as well as the emotions experienced by participants.

## Study 2

Study 2 was aimed at testing the causal role of hostility and status in triggering humiliation. A second goal of the present study was to deepen our analysis of the differences and similarities between humiliation, shame, and anger in terms of the role that a perpetrator (particularly his degree of hostility toward the victim and his status vis-à-vis the target) plays in eliciting these three emotions. To that end we presented participants (all psychology students) with an imagined scenario in which they received a very negative and demeaning academic assessment from an evaluator. Then, in a 2x2 between-subjects factorial design, we manipulated the hostile tone of the evaluator's feedback and his status vis-à-vis participants. We measured the key appraisals of humiliation (i.e., injustice and internalizing a devaluation of the self) and the participants' (i.e., target's) emotions (i.e., humiliation, shame, and anger). We expected that hostility and status would trigger humiliation, albeit each of these variables via a different path: the hostility of the perpetrator would trigger humiliation via the injustice

appraisal, whereas the status of the perpetrator would trigger humiliation via the internalization appraisal. We further expected shame to be affected exclusively via internalization (but not via injustice), and anger to be affected exclusively via injustice (but not via internalization).

#### Method

**Participants.** We used G\*Power (Faul, Erdfelder, Buchner, & Lang, 2009) to conduct a power analysis for an ANOVA statistical test, specifying 4 groups and 1 degree of freedom. Power was set to .80 (Cohen, 1992), and a small-to-medium effect size was assumed (f = .20). This power analysis revealed a required sample size of N = 199 to detect a significant effect (alpha level of .05) given there is a true effect. We finally got 253 (77.9% women;  $M_{age} = 33.45$ , SD = 11.86) undergraduate psychology students at National University of Distance Education (UNED) in Spain, who voluntarily accepted our invitation to take part in the study<sup>6</sup>.

Procedure. We asked participants to imagine themselves in a situation in which they had to write a half-page essay about Psychology, which would be then assessed by an evaluator. In particular, we asked participants to imagine they had to answer the following two questions: "What characterizes Psychology as a scientific discipline? Why is Psychology important for society?" To make the imagined scenario more realistic, participants actually answered these questions before continuing. Participants were then randomly assigned to either a high- or a low-status condition. In the high-status condition, we asked participants to imagine that a professor of Psychology graded their essays; in the low-status condition, we asked them to imagine that a student of Psychology graded their essays. Next, participants were randomly assigned to either a hostile or a non-hostile condition. All participants were asked to imagine they received a negative grade for their essays (3.8 points out of 10, "fail") accompanied by a negative

feedback message from their evaluator that varied contingent on the hostility condition. Participants in the hostile condition were asked to imagine they received the following feedback message: "The level of the ideas presented by the student is very poor, bordering on stupidity. Some of the ideas exposed in the work seem ridiculous when considering they came from a university student. From an academic point of view, the given answers leave much to be desired." Participants in the non-hostile condition were asked to imagine they received the following feedback message: "The level of the ideas presented by the student is very poor. Some of the ideas exposed in the work seem too basic when considering they came from a university student. From an academic point of view, the given answers are insufficient." We asked participants to experience this situation as real and then to answer a questionnaire with the measures described below.

**Measures.** Unless otherwise specified, response options ranged from 1 (strongly disagree) to 7 (strongly agree).

*Key appraisals.* To measure the injustice appraisal, participants indicated whether they thought the received evaluation was "unjust", "unethical," and "biased,"  $\alpha = .75$ . To measure the internalization appraisal participants answered the following two items: "The feedback reduced my self-esteem as a student," and "The feedback negatively affected the idea I have about myself as a psychology student," r(253) = .81, p < .001.

**Discrete emotions.** We asked participants to indicate on a scale from 1 (not at all) to 7 (extremely) the extent to which they felt humiliation, shame, and anger<sup>7</sup>.

*Manipulation checks*. To check the effectiveness of the status manipulation, participants answered the following two items: "My evaluator enjoys high status within the university community," and "My evaluator is a person highly valued within the scientific community," r(251) = .64, p < .001. To check the effectiveness of the hostility

manipulation, participants answered the following two items: "Regardless of the grade I got, I found the evaluator's comments to be hostile," and "The evaluator used an aggressive tone in his feedback", r(251) = .80, p < .001.

## **Results**

**Manipulation checks**. A Hostility x Status ANOVA conducted on the hostility manipulation check yielded a significant main effect of hostility (F(1,251) = 96.43, p < .001,  $\eta_p^2 = .28$ ), a nonsignificant main effect of status (p = .81), and a nonsignificant interaction (p = .15). Participants perceived the feedback of the evaluator significantly more hostile in the hostile (M = 5.70, SD = 1.43) than in the non-hostile condition (M = 3.60, SD = 1.93), t(249) = 9.82, p < .001, d = 1.25. A similar ANOVA on the status manipulation check yielded a significant main effect of status (F(1, 251) = 18.84, p < .001,  $\eta_p^2 = .07$ ), a significant main effect of hostility (F(1,251) = 7.53, p = .006,  $\eta_p^2 = .03$ ), and a nonsignificant interaction (p = .21). Participants perceived the evaluator to have significantly more status in the high- (M = 3.59, SD = 1.44) than in the low-status condition (M = 2.81, SD = 1.41), t(249) = 4.33, p < .001, d = .55. Participants perceived the evaluator to have significantly more status in the non-hostile (M = 3.45, SD = 1.54) than in the hostile condition (M = 2.95, SD = 1.37), t(249) = 2.74, p = .007, d = .35. All in all, we concluded that our procedure to manipulate both independent variables was effective.

Analysis of variance. To test our hypothesis, we first conducted a Hostility x Status ANOVA on each dependent variable followed up by t-tests on given paired means. Table 2 summarizes the results of these analyses, including the descriptive statistics by conditions. Table 3 shows the bivariate correlations between all the dependent measures.

*Key appraisals*. Results on the injustice appraisal yielded a significant main effect of hostility, a nonsignificant main effect of status, and a nonsignificant interaction (see Table 2 for statistics). As expected, participants appraised significantly more unjust the hostile (M = 4.83, SD = 1.21) than the non-hostile evaluation (M = 3.45, SD = 1.36), t(251) = 8.52, p < .001, d = 1.08. Results on the internalization appraisal yielded a significant main effect of status, a significant main effect of hostility, and a nonsignificant interaction. As predicted, participants internalized significantly more the devaluation coming from a high- (M = 4.20, SD = 1.85) than from a low-status evaluator (M = 3.73, SD = 1.94), t(251) = 1.99, p = .047, d = .25. Participants internalized also significantly more the devaluation coming from a hostile (M = 4.21, SD = 1.94) than from a non-hostile evaluator (M = 3.72, SD = 1.85), t(251) = 2.06, p = .040, d = .26.

*Emotions*. Results on humiliation yielded a significant main effect of hostility, a marginal main effect of status, and a nonsignificant interaction. Humiliation was significantly higher in the hostile (M = 4.79, SD = 1.97) as compared to the non-hostile condition (M = 3.70, SD = 1.94), t(251) = 4.41, p < .001, d = .56, and marginally higher in the high- (M = 4.47, SD = 1.94) as compared to the low-status condition (M = 4.03, SD = 2.10), t(251) = 1.74, p = .087, d = .22.

Results on shame yielded a significant main effect of status, a nonsignificant main effect of hostility, and a nonsignificant interaction. Shame was significantly higher in the high- (M = 4.65, SD = 1.92) as compared to the low-status condition (M = 4.16, SD = 1.99), t(251) = 2.01, p = .045, d = .25.

Results on anger yielded a significant main effect of hostility, a nonsignificant main effect of status, and a nonsignificant interaction. Anger was significantly higher in

the hostile (M = 4.35, SD = 1.90) as compared to the non-hostile condition (M = 3.02, SD = 1.76), t(251) = 5.79, p < .001, d = .72.

**Path analysis.** To test the pattern of indirect effects predicted in our hypothesis, we used the lavaan package in R to fit a path model in which the two independent variables (i.e., hostility and status) were the exogenous predictors, the two key appraisals (i.e., injustice and internalization) were the mediators, and the three target emotions (humiliation, shame, and anger) were the outcome variables. Figure 1 depicts the resulting saturated model, with only significant and marginal paths drawn.

As expected, humiliation was significantly affected by hostility and status via the two hypothesized indirect channels (i.e., the injustice and the internalization paths): via injustice, humiliation was significantly affected by hostility (indirect effect, IE: b =.35, p = .001); via internalization, humiliation was significantly affected by status (IE: b= .31, p = .042) and by hostility (b = .32, p = .036). In contrast to humiliation, shame was significantly affected exclusively via internalization, but not via injustice: via internalization, shame was significantly affected by status (IE: b = .30, p = .043) and by hostility (IE: b = .31, p = .037). Anger was significantly affected via injustice by hostility (IE: b = .86, p < .001). The IE of status on anger via internalization was marginal (IE: b = .10, p = .071); importantly, the effect of internalization on humiliation and on shame was significantly stronger than the effect of internalization on anger,  $\Delta \chi^2$ s(1) > 27.57, ps < .001. The effect of injustice on anger was significantly stronger than the effect of injustice on humiliation,  $\Delta \chi^2(1) = 14.18$ , p < .001. The effect of hostility on injustice was significantly stronger than the effect of hostility on internalization ( $\Delta \chi^2(1) = 12.12$ , p < .001), and also stronger than the effect of status on internalization,  $\Delta \chi^2(1) = 9.72$ , p = .002. These two last direct effects did not differ significantly in strength among them, p = .96. The rest of potential indirect effects of the independent variables on the outcome variables via the appraisals were nonsignificant, ps > .57.

#### **Discussion**

The results of Study 2 confirmed our hypothesis about the effect that a hostile high-status perpetrator has on humiliation. Moreover, these results clarified how humiliation relates to and differs from shame and anger in terms of the role that a perpetrator has in triggering these emotions. The results of the ANOVAs indicated that the perpetrator's hostility significantly affected injustice, humiliation, and anger, and that the perpetrator's high status significantly affected internalization, humiliation, and shame. These results were consistent with our hypothesis about the dual channel to humiliation, and so were the results of the path analysis: the hostility of the perpetrator had a significant indirect effect on both humiliation and anger via injustice, whereas the high status of the perpetrator had a significant indirect effect on both humiliation and shame via internalization. However, and in line with the results of Study 1, the results of Study 2 also showed that the role of the perpetrator's hostility in triggering humiliation via injustice was stronger than the role of the perpetrator's status via internalization.

Our results yielded two effects that were not expected: first, the hostility of the perpetrator significantly affected internalization, so that participants internalized more the devaluation in the hostile as compared to the non-hostile condition. This unexpected result raises the question of whether hostility *per se* could contribute to force someone to internalize a devaluation of the self that is imposed by others. We will discuss this question more deeply in the general discussion. Second, internalization was significantly related to anger. Importantly though, this effect was significantly weaker (statistically wise) than the relationship of internalization with humiliation and shame.

An important limitation of Study 2 is that it was based on an imagined scenario, so participants answered according to how they thought they would have appraised this situation and what they thought they would have felt. With the aim to replicate these findings overcoming this limitation, we ran the next experiment.

## Study 3

In Study 3 we aimed to test the role of the perpetrator's hostility and status as triggers of humiliation using a method based on a real scenario that overcame the limitations of the imagined-scenario method used in Study 2. To that end, we ran an experiment in which participants basically experienced the scenario described in Study 2 as a real situation.

#### Method

**Participants.** As for the previous study, we estimated a sample size of N = 199 to reach a power of at least .80. Two hundred and six first-year undergraduate psychology students at National University of Distance Education (UNED) in Spain voluntarily took part in the study. After dismissing nine who failed the reading check, 197 (72% females,  $M_{age} = 35.58$  years,  $SD_{age} = 10.53$ ) remained for the analysis. All participants were recruited before conducting the analysis.

**Procedure.** We adapted Harmon-Jones and Sigelman's (2001) procedure of inducing anger in the laboratory to evoke a devaluation of the self in a procedure that resembled the imagined scenario employed in Study 2. As a cover story, we informed participants that the experiment concerned the psychological aspects involved in anonymous academic evaluation. We explained participants that they were going to be assessed by an anonymous evaluator, to whom they would have afterwards the opportunity to provide anonymous feedback about his work as evaluator. Participants were then asked to write down briefly—but as accurately as they could—the answer to

the following two questions: 1) "What characterizes Psychology as a scientific discipline?", and 2) "Why is Psychology important for society?" In order to manipulate status, participants were told that either a psychology student or a professor from the Psychology department was going to evaluate their answers to the questions. We then randomly assigned participants to either a high- (i.e., evaluation done by a professor) or a low-status condition (i.e., evaluation done by a student), and informed participants about the type of evaluator (i.e., a professor or a student) who had assessed them in particular. All participants then received a negative feedback from their evaluators, including a grade of 3.8 points in a scale of 0 to 10 and a written feedback message accompanying this numerical grade, which we used to manipulate hostility. Participants were randomly assigned to either a hostile or a non-hostile condition. In the hostile condition, participants read the following version of the feedback message: "The level of the ideas expressed by the student is very poor, bordering on stupidity. Some approaches are ridiculous given that they come from a university student. Indeed, from an academic point of view, the answers are insufficient." In the non-hostile condition the feedback message read as follows: "The level of the ideas expressed by the student is very poor. Some approaches are too elementary given that they come from a university student. Indeed, from an academic point of view, the answers are insufficient." Upon receiving the feedback, participants answered a questionnaire with all the measures described below. Finally, participants were thoroughly debriefed by an experimenter. The UNED Bioethics Committee approved the research and its method.

**Measures.** Unless otherwise specified, response options ranged from 1 (strongly disagree) to 7 (strongly agree). We used the same items employed in Study 2 to measure injustice ( $\alpha = .81$ ). We also used the same items employed in Study 2 to measure internalization, adding a third one: "The feedback threatened the idea I had of

myself as a student of Psychology" ( $\alpha = .92$ ). This third item was added in order to enhance the reliability of this construct by capturing a sense of threat to the self that, we posit, is also a component of the internalization appraisal. To measure the discrete emotions, participants indicated, on a scale from 1 (not at all) to 7 (extremely), the extent to which they felt humiliation, shame, and anger<sup>7</sup>. To measure participants' feedback to the evaluator, they graded from 0 (very poor) to 10 (excellent) the work "as an evaluator" done by their particular evaluator. Additionally, we presented participants with a list of six statements that were supposedly samples of real messages that other participants in previous experiments had communicated to their evaluators as feedback. Four of the messages in the list were positive (e.g., "You are an excellent evaluator"),  $\alpha$ = .94, and two were insulting ("You are a pretentious idiot," and "You are stupid"), r =.82, p < .001. Participants were asked to indicate the extent to which they agreed/disagreed that each of these messages should be sent to their evaluator, explaining that whether or not the messages would be actually sent would depend on the level of agreement among the participants who were assessed by the same evaluator. We included the same items we used in Study 2 to measure the extent to which our manipulations were effective, rs > .69, ps < .001. Additionally, we included the following item to check whether participants' perception of the negativity of the received evaluation was unvarying across condition: "From an academic point of view, the evaluation I got was negative." Finally, we added a reading check consisting of the following two items: "The person who evaluated my work was a professor of Psychology," and "The person who evaluated my work was a student of Psychology."

#### Results

**Manipulation checks**. A 2 (Hostility: hostile versus non-hostile) x 2 (Status: professor versus student) ANOVA on the hostility manipulation check yielded a

significant main effect of hostility, F(1,197) = 89.51, p < .001,  $\eta_p^2 = .32$ , a nonsignificant main effect of status, and a nonsignificant interaction, ps > .28. As intended, participants perceived significantly more hostility in the hostile (M = 5.35, SD = 1.62) than in the non-hostile condition (M = 3.00, SD = 1.84), t(195) = 9.50, p < .001, d = 1.36.

The ANOVA on the status manipulation check yielded a significant main effect of status, F(1,197) = 13.53, p < .001,  $\eta_p^2 = .07$ , a significant main effect of hostility, F(1,197) = 20.87, p < .001,  $\eta_p^2 = .10$ , and a significant interaction, F(1,197) = 7.52, p = .007,  $\eta_p^2 = .04$ . As intended, participants perceived the professor to have significantly higher status (M = 4.04, SD = 1.85) than the student (M = 2.59, SD = 1.46), t(195) = 6.09, p < .001, d = .87. As in Study 2, participants perceived the non-hostile evaluator to have significantly higher status (M = 4.50, SD = 1.23) than the hostile evaluator (M = 3.68, SD = 1.38), t(195) = 4.38, p < .001, d = .63. The interaction was accounted for by a particularly strong effect of the status manipulation on the non-hostile, F(1,99) = 32.25, p < .001,  $\eta_p^2 = .25$ , as compared to the hostile condition, F(1,98) = 12.29, p = .001,  $\eta_p^2 = .11$ .

The ANOVA on the item to check the perceived negativity of the evaluation yielded a nonsignificant main effect of hostility (p = .74), a nonsignificant main effect of status (p = .86), and a nonsignificant interaction (p = .67). We therefore concluded that our manipulations of hostility and status were effective and, importantly, that the hostile and the non-hostile conditions were equally perceived in terms of the academic downgrading that they implied.

Analysis of variance. As in Study 2, in order to test our hypotheses we first ran 2x2 ANOVAs on all dependent measures followed up by t-tests on given paired means. Table 4 shows the descriptive statistics of all dependent measures by condition and the

results of the ANOVAs. Table 5 shows the bivariate correlations between the dependent measures.

*Key appraisals*. Results on the injustice appraisal yielded the expected significant main effect of hostility, a nonsignificant main effect of status, and a marginal interaction (see Table 4 for statistics). Participants' appraisals of injustice were significantly higher in the hostile (M = 3.74, SD = 1.70) as compared to the non-hostile condition (M = 2.12, SD = 1.24), t(195) = 7.61, p < .001, d = 1.09. The marginal interaction was accounted for by a stronger effect of hostility in the high- (F(1,100) = 48.20, p < .001,  $η_p^2 = .33$ ) as compared to the low-status condition (F(1,97) = 15.35, p < .001,  $η_p^2 = .14$ ).

Results on the internalization appraisal yielded the expected significant main effect of status, a nonsignificant main effect of hostility, and a nonsignificant interaction. Consistent with our hypothesis, internalization was significantly higher in the high- (M = 2.72, SD = 1.83) as compared to the low-status condition (M = 2.21, SD = 1.57), t(195) = 2.21, p = .036, d = .32.

*Emotions*. Results on humiliation yielded a significant main effect of hostility, a nonsignificant main effect of status, and a nonsignificant interaction. Humiliation was significantly higher in the hostile (M = 4.05, SD = 2.05) than in the non-hostile condition (M = 2.74, SD = 1.81), t(195) = 4.78, p < .001, d = .68. Results on shame yielded no significant main effect of status or hostility and a nonsignificant interaction. Results on anger yielded a significant main effect of hostility, a nonsignificant main effect of status, and a marginally significant interaction. Anger was significantly higher in the hostile (M = 2.60, SD = 1.83) than in the non-hostile condition (M = 1.95, SD = 1.45), t(195) = 2.78, p = .006, d = .40. The interaction effect was accounted for by a

stronger effect of hostility on anger in the high-  $(F(1,100) = 10.24, p = .002, \eta_p^2 = .10)$  as compared to the low-status condition  $(F(1,97) = 0.43, p = .52, \eta_p^2 = .00)$ .

*Participants' feedback to the evaluator*. Results on participants' grade to their evaluators yielded a main effect of hostility, a main effect of status, and a nonsignificant interaction. Participants graded significantly worse the work of the hostile (M = 5.20, SD = 2.68) than that of the non-hostile evaluator (M = 6.89, SD = 2.34), t(195) = 4.70, p < .001, d = .67. Participants graded worse the work of the low- (M = 5.54, SD = 2.25) than that of the high-status evaluator (M = 6.55, SD = 2.90), t(195) = 3.57, p < .007, d = .51. Results on insulting feedback yielded a marginal main effect of hostility, a nonsignificant main effect of status, and a nonsignificant interaction. The level of insulting feedback was marginally higher in the hostile (M = 1.93, SD = 1.63) as compared to the non-hostile condition (M = 1.55, SD = 1.26), t(195) = 1.82, p = .070, d = .26. Results on positive feedback yielded a significant main effect of hostility, a nonsignificant main effect of status, and a nonsignificant interaction. The level of positive feedback was significantly lower in the hostile (M = 2.72, SD = 2.06) as compared to the non-hostile condition (M = 3.49, SD = 2.03), t(195) = 2.65, p = .009, d = .38.

**Path analysis.** Using the lavaan package in R, we fitted the same path model tested in Study 2, in which hostility and status were the independent exogenous variables, both key appraisals (i.e., injustice and internalization) were the mediators, and the emotions (i.e., humiliation, shame, and anger) were the dependent variables. Figure 2 depicts the saturated model with only significant paths drawn.

Replicating results of Study 2, humiliation was significantly affected by hostility and status via the two hypothesized paths: via injustice, humiliation was indirectly and significantly affected by hostility (IE: b = .76, p < .001); via internalization, humiliation

was significantly affected by status (IE: b = .20, p = .047). As with humiliation, shame was significantly affected by status via internalization (IE: b = .27, p = .042); contrary to humiliation, shame was not significantly affected via injustice (p = .97). As with humiliation, anger was significantly affected by hostility via injustice (IE: b = .76, p < .001); contrary to humiliation, anger was not significantly affected via internalization (ps > .14). The rest of potential IEs from hostility and status on the emotions via the appraisals were all nonsignificant, ps > .41. It is worth mentioning that the main effect of hostility on injustice was significantly stronger than the main effect of status on internalization,  $\Delta \chi^2(1) > 11.55$ , p = .001.

The direct effects of the appraisals on the emotions were also in line with our expectations: humiliation was significantly related to both injustice (b = .47, p < .001) and internalization (b = .38, p < .001). As with humiliation, shame was significantly related to internalization (b = .52, p < .001); contrary to humiliation, shame was not significantly related to injustice (p = .97). As with humiliation, anger was significantly related to injustice (b = .47, p < .001). Although anger was also significantly related to internalization (b = .13, p = .037), this effect was significantly weaker than the effect of internalization on humiliation and shame,  $\Delta \chi^2$ s(1) > 11.53, ps < .001. The effect of internalization on humiliation,  $\Delta \chi^2$ (1) > 3.18, p = .075. The effect of injustice on humiliation did not differ significantly in strength from the effect of injustice on anger, (p = .97)8.

## **Discussion**

Replicating Study 2, the results of Study 3 were consistent with our hypotheses about the role that the perpetrator's hostility and high status vis-à-vis the target played in triggering humiliation. Indeed, both hostility and high status exerted the expected significant indirect effect on humiliation via the respective core appraisal: hostility via

injustice, status via internalization. However, also in line with Study 1 and 2, the results indicated that the effect of hostility on humiliation via injustice was stronger than the effect of status via internalization. Results of Study 3 also replicated those of Study 2 about the different role that hostility and status played in triggering humiliation, shame, and anger. Moreover, the results of the present study replicated previous findings about the differences and similarities between humiliation, shame, and anger in terms of the cognitive appraisals that underlie these emotions. It is worth emphasizing that this study replicated previous findings by using a highly realistic methodology in which participants experienced the situation we created in the laboratory as real, something that provided high ecological validity to our results.

Regarding the behavioral tendencies predicted by humiliation, our results showed that humiliation, similarly to anger, was related to negative responses toward the perpetrator, including insulting feedback to the evaluator and a negative assessment of his work as evaluator. This constituted another important difference between humiliation and shame, as shame was associated with a positive evaluation of the evaluator and a lesser degree of insulting feedback.

## **General Discussion**

Humiliation and shame have been often related in the literature; these two emotions have been even used interchangeably to a point in which it is not always clear whether humiliation is considered a different emotional experience or it is just seen as a particularly strong instance of shame (Elison & Harter, 2007). Recent evidence support the idea of humiliation as a discrete emotion (Fernández et al., 2015; Otten & Jonas, 2014). It has also been shown that, although humiliation and shame usually share the core cognitive appraisal of internalizing a devaluation of the self, these emotions differ in a second core appraisal that typically underlies humiliation, but not shame: the

appraisal of being a victim of injustice (Fernández et al., 2015)<sup>9</sup>. The present research goes a step further in this direction by showing the role of two key external determinants (the hostility of the perpetrator and his/her status vis-à-vis the victim) in facilitating the occurrence of this apparently paradoxical cognitive process (i.e., the process of internalizing an unjust devaluation of the self).

The present research provides evidence about the crucial role that a hostile perpetrator plays in triggering humiliation by increasing the key appraisal of injustice that underlies this emotional experience. Moreover, our results show that the presence of a perpetrator and his/her hostility vis-à-vis the target differentiates humiliation from shame and relates it to anger. The three studies reported in the present paper also showed a consistent pattern regarding the role that the status of the perpetrator vis-à-vis the victim plays in triggering humiliation: as expected, a high-status perpetrator was more likely to evoke humiliation because a high-status perpetrator facilitates the internalization of the devaluation of the self (see Fernández et al., 2015).

However, our results also indicated that the effects that the perpetrator's hostility and status exert on humiliation differ in strength. Indeed, whereas the effect of hostility on humiliation via injustice was constantly strong throughout the three studies, the effect of status via internalization was considerably weaker. For example, raters of Study 1 assessed that the perpetrators of the humiliation episodes had higher status than the perpetrators of the anger episodes, albeit this difference did not reach statistical significance. In Studies 2 and 3, the status manipulation did have a significant effect on internalization; however, in both these studies, the direct effect of hostility on injustice was significantly stronger than the direct effect of status on internalization. Also, the indirect effects of hostility on humiliation via injustice in Studies 2 and 3 were stronger than the indirect effects of status on humiliation via internalization. So it seems that the

perpetrator's hostility had a more straightforward and cleaner effect on humiliation via injustice (what we have called the "injustice channel" toward humiliation) than the effect of the perpetrator's high status via internalization (the "internalization channel"). We think this pattern of results could be explained in part by a higher complexity in the way participants appraised perpetrator's status as compared to a more straightforward way in which they perceived his hostility. Indeed, results of the manipulation checks of Studies 2 and 3 yielded an interesting unexpected (but logical) effect of hostility on the item we used to check the manipulation of status, so that in both studies participants perceived the hostile perpetrator to have significantly less status than the non-hostile perpetrator.

These results suggest that the effect of status on humiliation via internalization may be moderated by other variables that we should consider in future research. One possible moderator would be precisely hostility, so that the effect of high status on humiliation could be buffered, under given circumstances, by the hostility of the perpetrator (as if the high-status perpetrator would lose his/her status when he/she turns violent). However, the lack of a Hostility x Status interaction effect on humiliation in Studies 2 and 3 suggests that a third variable could be influencing this dynamic. In this respect, we suggest that future research should study the role that perpetrator's legitimacy plays in explaining the effect that both status and hostility exert on humiliation. It could be the case that only to the extent that the target legitimizes the perpetrator to assess the target's self, then status would lead to humiliation via the internalizing appraisal. However, it is also possible that the more the target legitimizes the perpetrator, the less he or she appraises the devaluation as unjust, which in turn would reduce the experience of humiliation in favor of the experience of shame.

Making the relationship between these three variables (i.e., status, hostility, and

humiliation) even more complex, status can provide legitimacy to the perpetrator, but hostility may reduce that legitimacy. Finally, we should consider also the possibility that being demeaned by a low-status perpetrator could lead to humiliation. That is, although the three studies showed a consistent pattern evidencing that humiliation seems more likely when a high-status perpetrator devaluates the victim as compared to when a low-status perpetrator does, the weakness of these effects across the three studies may suggest that, for some participants, being devaluated by a low status perpetrator could be perceived as particularly humiliating. Future research is therefore needed to better understand the complex role that status seems to play in humiliation.

The strong and consistent effects of hostility on humiliation that we found across the three studies seem to suggest that hostility is consubstantial to this emotion, so that people who feel humiliated perceive also that they are the targets of an external attack against their selves. In this regard, our results go in line with most of the existing literature, which usually conceptualizes humiliation as a phenomenon closely related to interpersonal hostility or intergroup conflict (Elison & Harter, 2007; Jonas et al., 2014; Lindner, 2006). These results also align themselves with previous findings about injustice being a core appraisal of humiliation (Fernández et al., 2015). The results of the present research about the straightforward and strong effects that hostility exerts on humiliation are relevant to better understand the emotional and cognitive processes that victims of everyday episodes of harassment may experience. Indeed, our results suggest that instances of even less extreme harassment, such as the microassaults that members of stigmatized minorities often experience (Sue, Capodilupo, et al., 2007), are likely to trigger humiliation. This could explain the extreme negative psychological outcomes that have been related to microaggressions (O'Keefe, Wingate, Cole, Hollingsworth, & Tucker, 2014). In fact, humiliation has been found to predict particularly negative

psychological outcomes, including suicidal ideation and depression (Torres & Bergner, 2012).

An interesting question for future research in this regard would be to study whether there are any instances of humiliation without hostility. That is, is it possible to internalize an unjust devaluation of the self without identifying a hostile perpetrator who attacks our core selves? The results of the present research tend to suggest that this is unlikely, but more research on this question would be needed. Related to this is the question of whether a hostile devaluation is more downgrading than a non-hostile one. Indeed, by treating someone with hostility, the perpetrator may well communicate to the victim the message that, for him/her, the victim is not worthy a more decent treatment. If this were so, a hostile devaluation could be a particularly strong antecedent of humiliation, not just because hostility triggers the injustice appraisal that underlies this emotion, but also because hostility could increase the devaluation transmitted by the perpetrator to the victim. We have tried to control this issue by including in Study 3 an item to measure the extent to which participants perceived their feedback negatively. Results of the analyses on this item showed that the perceived negativity of the feedback did not differ significantly across conditions, indicating that the devaluation was not perceived more downgrading in the hostile than in the non-hostile condition. Moreover, in Study 3 hostility had a nonsignificant effect on the internalization of the devaluation, indicating that the hostile message did not devalue the targets' selves more than the non-hostile one. However, in Study 2, we did get an unexpected indirect effect of hostility on humiliation via the internalization appraisal. Future research should therefore clarify also whether being the target of a hostile perpetrator who devaluates the self with enough violence can be sufficient to force the victim to internalize the devaluation and why.

It is worth noting that the term humiliation can be used to refer to both, the emotion (e.g., "I feel humiliated") and the actions undertaken by a perpetrator against a victim that may evoke such emotion (e.g., "I have been humiliated by someone") (Elison & Harter, 2007). Importantly, the actions that we describe as humiliating may or may not evoke the emotion of humiliation on the victims. In the present research, we have studied humiliation as an emotional experience aroused by an evaluator's behavior that could be well described as humiliating. Therefore, the core appraisals of humiliation we have measured (i.e., injustice and internalization) are considered in our research as antecedents of the emotion of humiliation, because cognitive appraisals are typically understood as antecedents of the emotions they underlie (Moors, Ellsworth, Scherer, & Frijda, 2013). But these two appraisals could also be considered as the consequences of the actions carried out by the perpetrator, and, to the extent that we refer to those actions as "humiliations", both core appraisals would be then the outcomes of humiliation (humiliation understood here as the actions, not as the emotion). This dichotomy in understanding humiliation as action and emotion constitutes an interesting aspect of humiliation, which surely deserves future research.

One limitation of the present research, which relates to some of the points we discussed above, is that our status manipulation did not distinguish between the so-called *dominance*, or fear-based status, and *prestige*, or respect-based status (Cheng, Tracy, Foulsham, Kingstone, & Henrich, 2013; Henrich, & Gil-White, 2001). It could well be the case that, whereas fear-based status exerts an effect on humiliation via both, injustice and internalization, respect-based status affects humiliation only via internalization; but, again, the question here would be whether respect-based status would be undermined by hostility, and/or if respect-based status would lead to legitimization of the devaluation to a point in which this devaluation is appraised as fair,

triggering in this way shame rather than humiliation. Future research should also address this question.

A second limitation of the present research is that the core appraisals and the emotions in the path models of Studies 2 and 3 were cross-sectional. Although in both studies the independent variables were experimentally manipulated, the correlational nature of the associations between the appraisals and the emotions limits the potential to extract causal conclusions from the indirect effects depicted in those models (Bullock, Green, & Ha, 2010).

Finally, we would like to discuss briefly the relationship between humiliation and the self-abasing dimension of the sentiment of humility. Recent research on the psychological structure of humility (Weidman, Cheng, & Tracy, 2016) has shown that it has two dimensions: appreciative humility, related to success and authentic pride, and self-abasing humility, which typically arises after a personal failure, involves negative self-evaluative appraisals, and relates to low self-esteem, shame, withdrawal, and submissiveness. We think the emotional experience of humiliation and this negative dimension of humility are indeed similar. However, we posit that humiliation and humility differ critically in two important aspects: first, in humiliation the devaluation of the self is forced externally by the actions of others, whereas the sentiment of humility is internally rooted and is based on the person's evaluation of his/her own actions and failures. Second, the appraisal of being a victim of injustice, which is a basic appraisal for humiliation, is not a core component of humility.

To conclude, the evidence provided in the present research pictures humiliation as an emotional experience that arises when the target's core self is unjustly violated by a perpetrator who is able to force on the victim the internalization of his/her own self-devaluation, breaking down the natural defense we all should have to protect our self-

esteem. The perpetrator's hostility in particular and, to a lower extent, his/her high status vis-à-vis the target are factors that contribute to make this complex cognitive and emotional process possible.

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#### Footnotes

<sup>1</sup>In the first paper we published about humiliation (Fernández et al., 2015), we referred to this appraisal as "the acceptance" of a devaluation of the self. We chose the term "acceptance" as an opposite to the term "rejection" of the devaluation, meaning that the victims of devaluation who *reject* the devaluation would more likely feel anger rather than humiliation; the emotional experience of humiliation would typically imply, we posited, the internalization or acceptance of the devaluation. However, the term acceptance has a connotation of willingness or even legitimization, which we did not mean to be part of this appraisal at all. Indeed, a central aspect of our theoretical proposal about humiliation is that a victim, in order to feel humiliated, should, not only internalize the devaluation, but also appraise it as unfair. So there is no willingness or legitimization in our understanding of humiliation. Moreover, we propose that when victims internalize a devaluation of the self that they appraise as fair, they would more likely feel shame rather than humiliation. In order to avoid this connotation of willingness or legitimization that the term acceptance has, we will use from now on the term "internalization" of a devaluation to refer to this appraisal.

<sup>2</sup> We used G\*Power (Faul, Erdfelder, Buchner, & Lang, 2009) to conduct posthoc power analyses for an ANOVA with 3 groups. Setting N = 129 and an effect size of f = .52, which were the average N and effect size respectively in the tests we carried out, the resulting power was of .99 (alpha = .05). Setting N = 150 and f = .35, which were the parameters in the weakest significant effect we got, the resulting power was .97. Setting N = 150 (the total N) and Cohen's (1996) medium effect size (f = .25), the resulting power was .78.

<sup>3</sup> This writing task was part of the procedure in a study we included in a previous publication (Fernández et al., 2015, Study 2). Upon completion of this writing task,

participants answered a questionnaire with the measures reported there. The texts themselves, however, were neither analyzed nor included in the aforementioned publication.

<sup>4</sup> There were only 10 episodes of shame that involved a perpetrator, versus 45 and 38 in the humiliation and anger condition, respectively. This difference in cases would lead to an unbalanced design if we were to compare shame with humiliation and anger on these dimensions.

<sup>5</sup> The results of the ANOVAs on hostility and status when the shame condition was included in the comparisons were F(2,91) = 10.12, p < .001,  $\eta_p^2 = .18$  and F(2,91) = 1.72, p = .185,  $\eta_p^2 = .04$ , respectively. The means and standard deviations of hostility and status in the shame condition were M = 4.90, SD = 2.11 and M = 3.80, SD = 2.64, respectively.

<sup>6</sup> The number of students who positively answer to our call for volunteers exceeded the required sample size revealed by our power analysis. We decided to conduct the experiment with all the volunteers without excluding anyone, because the option to participate in the experiment was offered as a formative practical activity during the course. No new participants were added after initiating the data analysis.

<sup>7</sup> In order to conceal the objective of the experiment, we mixed the following positive items among those used to measure each dependent variable: "educational" and "well-intentioned" (mixed with items used to measure the injustice appraisal); "The feedback helped me to identify areas of improvement" and "The feedback strengthened my confidence in my capacities" (internalization appraisal); "joy," "satisfaction," and "pride" (discrete emotions).

<sup>8</sup> Additionally, we fitted an extended version of the path model depicted in Figure 2 that included participants' feedback to the evaluator as outcome variables. Results of this extended model are included as supplementary material.

<sup>9</sup> We discuss here an ideal cognitive model of humiliation based on our theoretical developments and supported by our data. We do acknowledge, however, that people may experience the emotion of humiliation in different ways. The cognitive appraisals of injustice and internalization of a self-devaluation should not be therefore taken as necessary and sufficient conditions for humiliation, but rather as core appraisals in the *typical* experience of humiliation. Moreover, the strong correlations between humiliation and shame, and, to a lesser degree, between humiliation and anger, indicate that the limits between these and other related emotions are vague. It is therefore likely that people may feel the emotion of humiliation without internalizing a devaluation of the self or without the appraisal of injustice. However, the typical experience of humiliation would be one in which these two core appraisals (i.e., internalizing and injustice) are present.

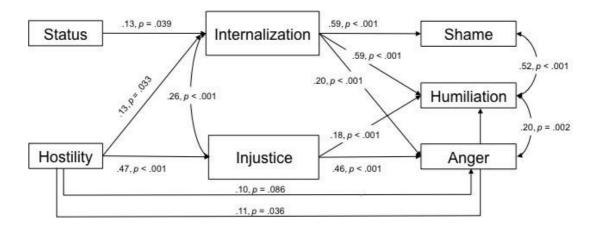


Figure 1. Saturated path model of the effect of hostility and status on the key appraisals (i.e., injustice and internalization) and the emotions (i.e., humiliation, shame, and anger), Study 2. Coefficients are standardized. Only significant and marginal paths are drawn.

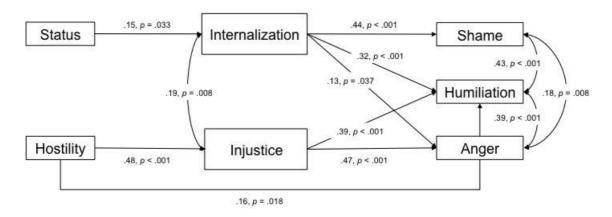


Figure 2. Saturated path model of the effect of hostility and status on the key appraisals (i.e., injustice and internalization) and the emotions (i.e., humiliation, shame, and anger), Study 3. Coefficients are standardized. Only significant paths are drawn.

Table 1

Bivariate correlations between the dimensions assessed by the raters, Study 1.

	1.	2.	3.
1. Hostility	-		
2. Status	.03	-	
3. Injustice	.77**	.23*	-
4. Devaluation of the self	.47**	.02	.27**

Note: \*\* = p < .001; \* = p < .05; + = p < .10

Table 2

Descriptive Statistics and Results of the 2(Hostility: hostile vs. non-hostile) x 2(Status: high vs. low) ANOVAs on each Dependent Variable, Study

2

	<u>I</u>	Descriptive statis	stics: Mean (SD	<u>))</u>	Hostility x Status ANOVA, Fs(1,253)			
	<u>High</u>	status	Low	<u>status</u>	Main	effects		
Measure	Hostile	Non-hostile	Hostile	Non-hostile	Hostility	Status	Interaction	
Injustice	4.96 (1.06)	3.39 (1.34)	4.70 (1.33)	3.52 (1.39)	$F = 72.43, p < .001, \eta_p^2 = .23$	$F = 0.13, p = .72, \eta_{\rm p}^2 = .00$	$F = 1.49, p = .22, \eta_{\rm p}^2 = .01$	
Internalization	4.56 (1.91)	3.85 (1.72)	3.87 (1.92)	3.57 (1.97)	$F = 4.45, p = .036, \eta_p^2 = .02$	$F = 4.14, p = .043, \eta_{\rm p}^2 = .02$	$F = 0.74, p = .39, \eta_{p}^{F_2} = .00$	
Humiliation	5.13 (1.76)	3.83 (1.89)	4.46 (2.12)		$F = 19.91, p < .001, \eta_p^2 = .07$		$F = 0.70, p = .40, \eta_{p}^{r_{2}} = .00$	
Shame	5.00 (1.80)	4.31 (2.00)	4.17 (2.03)		$F = 2.09, p = .15, \eta_p^2 = .01$		$F = 1.85, p = .18, \eta_{p}^{1/2} = .01$	
Anger	4.33 (1.93)	3.10 (1.84)	4.37 (1.88)		$F = 33.34, p < .001, \eta_p^2 = .12$		$F = 0.18, p = .67, \eta_{p}^{r_2} = .00$	

Table 3

Bivariate correlations between the dependent measures, Study 2

	1.	2.	3.	4.
1. Injustice	-			
2. Internalization	.29**	-		
3. Humiliation	.40**	.67**	-	
4. Shame	.15*	.59**	.69**	-
5. Anger	.57**	.34**	.45**	.22**

Note: \*\* = p < .001; \* = p < .05

Table 4.

Descriptive Statistics and Results of the 2(Hostility: hostile vs. non-hostile) x 2(Status: high vs. low) ANOVAs on each Dependent Variable, Study

3

	Descriptive statistics: Mean (SD)				Hostility x Status ANOVA, Fs(1,197)			
	<u>High</u>	status	Low	<u>status</u>	<u>Main</u>			
	Hostile	Non-hostile	Hostile	Non-hostile	Hostility	Status	Interaction	
Injustice	3.95 (1.68)	1.94 (1.16)	3.52 (1.71)	2.31 (1.30)	$F = 57.95, p < .001, \eta_p^2 = .23$	$F = 0.02, p = .90, \eta_p^2 = .00$	$F = 3.58, p = .060, \eta_{p}^{2} = .02$	
Internalization	2.68 (1.86)	2.77 (1.81)	2.05 (1.60)	2.37 (1.54)	$F = 0.69, p = .41, \eta_{\rm p}^2 = .00$	$F = 4.47, p = .036, \eta_p^2 = .02$	$F = 0.23, p = .64, \eta_{\rm p}^{2} = .00$	
Humiliation	4.24 (2.02)	2.74 (1.75)	3.85 (2.08)	2.73 (1.88)	$F = 22.57, p < .001, \eta_p^2 = .11$	$F = 0.50, p = .48, \eta_p^2 = .00$	$F = 0.48, p = .49, \eta_{p}^{1/2} = .00$	
Shame	3.78 (2.30)	3.66 (1.88)	3.08 (1.93)		$F = 0.32, p = .57, \eta_{\rm p}^2 = .00$	$F = 2.04, p = .16, \eta_{\rm p}^{12} = .01$	$F = 0.96, p = .32, \eta_{\rm p}^{r_2} = .00$	
Anger	2.82 (2.00)	1.74 (1.31)			$F = 7.61, p = .006, \eta_p^2 = .04$	$F = 0.00, p = .96, \eta_p^2 = .00$	$F = 3.44, p = .065, \eta_{p}^{2} = .02$	
Evaluator's grade	5.44 (2.96)	7.66 (2.40)	4.96 (2.35)		$F = 23.05, p < .001, \eta_p^2 = .11$	$F = 8.48, p = .004, \eta_p^2 = .04$	$F = 2.36, p = .13, \eta_{p}^{2} = .01$	
Insulting feedback	2.19 (1.88)	1.58 (1.35)	1.66 (1.29)		$F = 3.25, p = .073, \eta_{p}^{2} = .02$	$F = 2.06, p = .15, \eta_p^{\frac{1}{2}} = .01$	$F = 1.32, p = .25, \eta_{p}^{1/2} = .01$	
Positive feedback	2.61 (1.88)	3.63 (1.95)			$F = 6.91, p = .009, \eta_{\rm p}^{\rm P_2} = .04$	$F = 0.01, p = .93, \eta_p^{P_2} = .00$	$F = 0.75, p = .39, \eta_{\rm p}^{\rm r_2} = .00$	

Table 5

Bivariate correlations between the dependent measures, Study 3

	1.	2.	3.	4.	5.	6.	7.
1. Injustice	-						
2. Internalization	.12+	-					
3. Humiliation	.49**	.35**	-				
4. Shame	.04	.44**	.47**	-			
5. Anger	.51**	$.16^{*}$	.52**	.21**	-		
6. Evaluator's grade	59**	03	39**	.04	44**	-	
7. Insulting feedback	.25**	.21**	.32**	.05	.30**	17*	-
8. Positive feedback	30**	12+	29**	08	23**	.46**	27**

Note: \*\* = p < .001; \* = p < .05; + = p < .10