

The role of witnesses in humiliation: Why does the presence of an audience facilitate humiliation
among victims of devaluation?

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Abstract

We examined the role that witnesses play in triggering humiliation. We hypothesized that witnesses trigger humiliation because they intensify the two core appraisals underlying humiliation: unfairness and internalization of a devaluation of the self. However, we further propose that witnesses are not a defining characteristic of humiliating situations. Results of a preliminary study using an event-recall method confirmed that witnesses were as characteristic of humiliating episodes as of those that elicited shame or anger. In Experiments 1 and 2, we manipulated the presence (vs. absence) of witnesses when a professor devalued participants, as well as the hostile tone of this devaluation. As hypothesized, in both experiments, witnesses indirectly increased humiliation via the appraisal of unfairness. Results of Experiment 2 revealed that the presence of witnesses also interacted with hostility, enhancing humiliation. As expected, this moderating effect occurred via the other key appraisal of humiliation (i.e., internalization).

Keywords: humiliation, self-concept, shame, emotion, witnesses

The role of witnesses in humiliation: Why does the presence of an audience facilitate humiliation among victims of devaluation?

In his pioneering work on the psychology of humiliation, Klein (1991) posited that “the prototypic humiliating experience involves a triangle that includes the *humiliator* (i.e., those who inflict the disparagement), the victim (i.e., those who experience it as disparagement), and the witness (i.e., those who observe what happens and agree that it is disparagement)” (p. 9). From this early work until more recent ones, the presence of third-party observers who witness the devaluation of a target has been considered an important factor in humiliation (Elison & Harter, 2007; McCauley, 2017). However, studies that have empirically tested the effect of an audience on humiliation are scarce (e.g., Combs et al., 2010; Elison & Harter, 2007; Mann et al., 2017). Moreover, to the best of our knowledge, there are no studies that investigated the psychological processes that explain *why* an audience exerts its effect on humiliation. The main goal of the present research is to study the role that an audience plays in the emotional experience of humiliation, identifying the psychological processes through which the presence of witnesses exerts its effect on humiliation and clarifying the extent to which they are a central component in the emotional experience of humiliation.

The Nature of Humiliation as a Self-Conscious Emotion

Humiliation is a particularly aversive and intense emotion that arises when a person internalizes an unfair devaluation that others are imposing on him/her (Elshout et al., 2017; Fernández et al., 2015; McCauley, 2017; Otten & Jonas, 2014). In recent studies, Fernández and colleagues (Fernández et al., 2015, 2018), identified two cognitive appraisals that underlie humiliation and help differentiate it from the closely-related emotions of shame and anger: (a) seeing oneself as a target of an unfair treatment inflicted by others, and (b) internalizing a devaluation of the self (i.e., acknowledging there is something wrong in ourselves that makes us unworthy). People who simultaneously experienced these two cognitive appraisals were repeatedly found to be more likely to feel humiliated. Moreover, humiliation was found to differ from shame in the unfairness appraisal: When a person internalizes a devaluation of the self that he or she appraises as fair (rather

than unfair, as it is the case in humiliation), shame tends to be the dominant emotion. Anger and humiliation differed in the internalization appraisal: When a person appraises that he or she is the target of an unfair treatment, but does not internalize the devaluation, then anger tends to be the dominant emotion. Humiliation therefore relates to shame in the internalization appraisal and to anger in the unfairness appraisal.

Previous work has also found that hostility is a particularly strong trigger of humiliation, stronger than other situational factors that also facilitate this emotion, such as the status of the perpetrator vis-à-vis the victim (Fernández et al., 2018). This previous work has shown that the effect of hostility on humiliation was mediated mainly by the unfairness appraisal, and that humiliating events are often caused externally by perpetrators who force the devaluation of the victim. As explained in more detail below, we propose here that hostility may facilitate humiliation also via the internalization appraisal, particularly when combined with the presence of witnesses.

The Role of Witnesses in Humiliation

The few existing empirical studies that have directly addressed the role of witnesses on humiliation, have not clarified how and why the presence of third-party observers affects this emotion. Moreover, in most of them it is not possible to disentangle the effect of an audience being present from that of the hostile tone of that audience. For instance, Mann et al. (2017) showed that being insulted in front of a laughing audience was more humiliating than being insulted in front of an audience that does not laugh. But, given that there was no condition without an audience, this work focused on the effect that a *laughing* audience (versus a respectful one) has on humiliation.

Using vignettes, Elison and Harter (2007) manipulated publicity and a set of other variables, such as the type of the humiliating action and the intent of the audience. They found that people thought they would feel worse about themselves if they were devalued in the presence of an audience than if no audience witnessed the devaluation. They also found that hostile intent perceived by victims in the form of being mocked and laughed at could be especially humiliating, concluding that

a *mocking audience* was “the single best predictor of when participants believe they would feel humiliated” (p. 326). Although these authors suggested that unfairness and threat to the self-concept are key appraisals underlying humiliation, their work did not examine how the presence of an audience affects humiliation via these two key appraisals.

Combs and colleagues (2010) studied humiliation, together with shame and guilt, in situations in which a person committed a moral transgression (plagiarizing in the academic context). They compared the extent to which participants felt the three emotions in three different conditions: a completely “private” one, in which no one ever found out about the moral transgression, a condition they called “public-individual”, in which the protagonist was reprimanded by a professor for plagiarizing without no one else witnessing this rebuke, and a “public-group” condition, in which the protagonist was reprimanded by the professor in front of the class. Their results showed that, in the completely private condition, humiliation was unlikely to arise, whereas shame and guilt were likely to be experienced. The authors concluded that some degree of publicity, understood as the presence of at least someone who confronted the transgressor with his immoral actions, was necessary for humiliation to arise.

In our understanding of humiliation, however, this result informs more about the interpersonal nature of humiliation (Lindner, 2006), rather than about the role that publicity –understood here as the presence of third-party observers who *witness* the devaluation– plays in humiliation. Indeed, we have found in our previous research that the presence of someone who imposes some devaluation onto the victim (i.e., a perpetrator) is a prototypical characteristic of situations that trigger humiliation (see Fernández et al., 2018, Study 1). In the present research we focus on situations in which humiliation arises as a result of a devaluation imposed by others. In this sense, we consider humiliation mainly a victim-emotion, i.e., an emotion that is triggered by someone who devalues the victim. The question we want to address, therefore, relates to how the presence of

witnesses of such devaluation affects humiliation, taking for granted that a perpetrator is always present in the situation (i.e., that there are no completely private situations that trigger humiliation).

In regard to the question that is the focus of the present research (i.e., the presence of third-party observers), Combs et al. (2010) found higher levels of humiliation when the professor reprimanded the protagonist in front of the class than in the absence of witnesses. However, this effect was replicated only if the professor intended to make the judgment public; if, on the contrary, public knowledge of the rebuke came accidentally (i.e., without the professor being aware), it had no significant effect. These results (and also those presented by Elison & Harter, 2007) suggest that the effect of witnesses on humiliating experiences may be related to the unfairness component of humiliation.

Finally, in our previous work (Fernández et al., 2015, Study 1), we found that the presence of an audience was not a critical factor to differentiate humiliation from shame or anger; only the two core appraisals (injustice and internalization) were key to differentiate humiliation from shame and anger, respectively. However, we also found a marginally significant association between the presence of witnesses and humiliation, whereas such relationship was not found in regard to shame and anger. We concluded from these results that seemingly witnesses were not a necessary condition for humiliation to arise, but its presence increased the likelihood of experiencing that emotion.

Altogether, the few studies that have empirically addressed the effect of third-party observers on humiliation have found that witnesses increase the strength of the experience of the emotion. Most of these works also tend to emphasize the importance of the audience dimension in humiliation, as if witnesses would be a particularly key component of situations that trigger humiliation. In this line, the existing literature suggests that the presence of witnesses is a prototypical characteristic of humiliation (Elshout et al., 2017). However, at the same time, there is a generalized agreement about acknowledging that humiliation can occur without the presence of third-party observers (Combs et al., 2010; Fernández et al., 2015; McCauley, 2017). All in all, we

propose that two key questions remain unclear regarding the role of witnesses in humiliation, both of which we address in the present work: first, and most important, what is the psychological mechanism through which the presence of witnesses affects humiliation (i.e., *why* witnesses may increase humiliation)? Second, to what extent is the presence of an audience witnessing the target being devaluated, in and of itself, a crucial component of humiliation?

In order to address these questions, it is important to differentiate between the situational factor of an audience being present in the humiliating event—what Klein (1991) described as the “witness” element in the triangle of humiliation— and other variables and constructs that would play a role in the process, specifically the degree of hostility that the target confronts in the situation and the appraisals (i.e., unfairness and internalization) through which witness presence and devaluation hostility exert their effects on humiliation. Disentangling these different factors can also help us to better understand the similarities and differences between humiliation and related emotions, such as shame and anger.

Regarding the first question of why witnesses affect humiliation, which is the main focus of our research, we propose that their presence exerts an indirect effect via the unfairness appraisal, because being devaluated in front of others is perceived as more unfair than being insulted when no one is watching, which, in turn, affects humiliation. In this sense, humiliation resembles anger, as these two emotions share the appraisal of unfairness and therefore are equally affected by witnesses via unfairness.

But we also propose that witnesses would facilitate the experience of humiliation via the internalization appraisal. The reason would be that being devaluated in front of an audience (as compared to being devaluated in an interpersonal context) implies a strong threat to the self because it compromises our relational value, facilitating therefore the loss of self-esteem (Richman & Leary, 2009). As a social species that has evolved depending on successful cooperation with conspecifics for survival and reproduction, we have an innate need to be accepted and valued by others

(Baumeister & Leary, 1995; Gilbert, 1997). As proposed by the sociometer theory, because of this need to belong, we are constantly monitoring clues about our relational value (Leary & Guadagno, 2011); when our relational value is at risk, we experience a decrease in self-esteem. We propose that this is what happens when we experience a public devaluation: being devaluated in front of witnesses threatens our relational value, facilitating the internalization appraisal that underlies humiliation. Because the internalization appraisal is a defining characteristic of all negative self-conscious emotions, including humiliation and shame (Tracy & Robins, 2007), we expect witnesses would affect similarly both these emotions via internalization.

Regarding our second research question (i.e., how core is the presence of witnesses for humiliation), we propose that there is no need for third-party observers to be present in order to force a victim to internalize an unfair devaluation of the self. That is, contrary to the idea that the presence of witnesses is a core component of humiliating situations (see, for instance, Klein, 1991), we posit that humiliation can equally occur with or without witnesses and that the presence of witnesses is relevant not only for humiliation but also to other emotions such as shame and anger. However, we do expect, in line with previous findings (e.g., Combs et al., 2010), that, when in a humiliating-prone situation witnesses are present, their presence would affect humiliation in particular (i.e., more than shame and anger), because the presence of witnesses affects the two appraisals underlying humiliation (i.e., unfairness and internalization), whereas shame and anger are only affected by witnesses unilaterally (shame via internalization, but not via injustice, and anger via injustice, but not via internalization).

Finally, in line with previous research that shows that hostility is a particularly strong trigger of humiliation, we expect hostility to affect humiliation more than witnesses. Indeed, humiliation has been defined as “the enforced lowering of any person or group through a process of subjugation that damages their dignity” (Lindner, 2006, p. xiv); this *enforced lowering* often implies hostility, and therefore being demeaned with hostility would be experienced as particularly humiliating (Fernández

et al., 2018). Moreover, we propose that the combination of being devalued with hostility and in front of witnesses would facilitate in particular the internalization of a devaluation of the self, boosting humiliation more than shame and anger.

To summarize, we hypothesize that being devalued in front of witnesses increases humiliation via a dual path: via the unfairness appraisal, witnesses increase humiliation (and anger), because being devalued in front of others would be perceived as unfair. Via internalization, witnesses increase humiliation (and shame), because being devalued in front of others elevates the sense of exposure of the self that characterized all negative self-conscious emotions. Moreover, because hostility has been shown to be a particularly strong trigger of humiliation (Fernández et al., 2018), we expected the combination of witnesses and hostility to particularly boost humiliation. Importantly, this enhancing role played by the presence of witnesses in humiliation does not mean that witnesses are especially characteristic of situations that trigger humiliation as compared to situations that trigger shame or anger. In this regard, we posit that humiliation, similarly to shame and anger, can occur with or without third-party observers.

We tested these hypotheses in two experiments preceded by a preliminary study. In the preliminary study we used an event-recall method to explore the role of witnesses and hostility in situations that triggered either humiliation, shame, or anger. In the two experiments we manipulated the presence of witnesses and the degree of hostility with which the perpetrator downgraded a victim, and measured the two appraisals of humiliation (i.e., unfairness and internalization) and the emotions.

Preliminary Study

With the aim to analyze the role that witnesses and hostility played in real-life events that triggered humiliation, we asked participants, in a between-subjects factorial design, to describe an autobiographic episode in which they felt either humiliation, shame, or anger. Participants then indicated whether witnesses were present or not in these episodes, the extent to which the event

gained publicity, and the degree of hostility participants perceived in the situation. We further measured the extent to which participants internalized a devaluation of the self. We predicted, first, that the presence of witnesses and the level of publicity that the event gained would not differ across conditions (i.e., that humiliation would not differ from shame or anger in the extent to which witnesses are a necessary or crucial factor to trigger the emotion). Second, we expected events that triggered humiliation to be appraised as more hostile than events that triggered shame; we did not expect events that trigger humiliation and anger to differ in hostility. Finally, because humiliation and shame share the appraisal of a devaluation of the self, we expected higher levels of internalization in humiliation and shame, as compared to anger episodes. However, because in humiliation internalization is *externally forced by others* (Lindner, 2006), whereas in shame it is *non-forced* (Ferguson et al., 2007; Fernández et al., 2015, 2018), we expected to find this distinction in participants' appraisals of the episodes (i.e., internalization would be externally forced in episodes that trigger humiliation and non-forced in episodes that triggered shame). The UNED Bioethics Committee approved the research and its method.

Method

Materials, analysis codes, data files, and a codebook for interpreting the data files of all the studies included in this article are available at the first author OSF account (https://osf.io/fvurk/?view_only=8a23ec0ecdf8463eb7895c9829786ac2). The studies were not pre-registered.

Participants

We used G*Power (Faul et al., 2009) to conduct a power analysis for an ANOVA specifying 3 groups and 2 degrees of freedom. Power was set to .80. Because we planned to collect answers among a quite varied sample in terms of socio-demographics using a “snowball” technique, we assumed that some of our effects could be small, so we set a conservative small effect size of $f = .10$ ($\alpha = .05$). This resulted in a required sample size of $N = 969$.

We recruited our participants using a “snowball” technique with psychology students at the National University of Distance Education (UNED) in Spain who, in turn, recruited among their personal circle of acquaintances. A total of 1049 participants began to answer the questionnaire and completed at least the first set of questions (i.e., demographics). Eighty-one participants (8%) did not continue with the description of the emotional-eliciting situation. The remaining 968 (64% women; $M_{age} = 33.47$, $SD = 12.86$; $M_{ses} = 4.00$, $SD = 1.16$; 62% holding a higher education degree) described an autobiographic episode in which they had felt either humiliation ($N = 334$), shame ($N = 309$), or anger ($N = 325$). Of this group, 35 participants (4%) completed the questionnaire only partially.

Procedure

Relying on the method used by Tangney et al. (1996) to study the difference between self-conscious emotions, we randomly assigned participants to one of three conditions (humiliation, shame, or anger) and asked them to anonymously describe an autobiographic episode in which they had felt the target emotion. They then answered a series of questions related to that episode.

Measures

Unless otherwise specified, response ranged from 1 (not at all) to 7 (extremely). Items had a “don’t know/don’t answer” option for those who wanted to leave a question blank.

Publicity Assessment. To assess the level of publicity participants answered the following question: “The episode you described was public, or was it made public? That is, did anyone other than those directly involved in the situation witness what happened?” The answer options were “yes”, “no”, “maybe.” Those who answered “yes” or “maybe” to this question also answered the following one: “To what degree was the situation public?”.

Perceived Hostility. We assessed the level of hostility with the following two items: “To what extent were you a victim of hostile treatment by other people during the described episode?” and “To what extent were you a victim of aggressive or violent treatment by other people during the described episode?”, $r(914) = .72$, $p < .001$.

Internalization of a Devaluation of the Self. We measured internalization with eleven items. Five assessed *forced internalization*: "I was unjustly devaluated as a person by others," "I was a victim of others who made me see myself as a worthless person," "Other people forced me to feel inferior to them," "I was trampled by other people," and "I was forced by others to feel that my worth as a person was not much." And another six assessed *non-forced internalization*: "I experienced a loss of self-esteem," "I had the feeling that I left much to be desired," "I saw myself negatively," "I felt contempt toward myself," "I experienced doubts about myself," and "I was aware that I had failed myself."

A principal factor analysis confirmed the two-factor solution, with all items loading with factorial weights greater than .72 in their respective factor, and with factorial weights lower than .45 in the alternative factor. We therefore computed two composite measures by averaging the appropriate items: forced internalization ($\alpha = .92$) and non-forced internalization ($\alpha = .92$). The correlation between the two measures was $r(936) = .47, p < .001$.

Additional measures were included for exploratory reasons. Details on these measures and its analysis are provided in the supplemental materials.

Results and Discussion

We conducted an ANOVA by condition on each continuous dependent variable controlling for gender and minority status¹, followed up by Tukey tests (see Table 1 for statistics by condition). We also conducted chi-squared analysis where relevant. Table 2 shows the bivariate correlations between all outcome measures.

Results indicated that the extent to which the events gained publicity did not vary significantly across conditions (see Table 1). Moreover, the presence of witnesses did not differentiate humiliation episodes from those that triggered shame or anger: in the *humiliation* condition, 63% of participants indicated that witnesses were present in the episode they described and 26% indicated they were not. The remaining 11% answered "maybe" to this item. In the *shame*

condition, 55% indicated witnesses were present, 33% not present, and 12% answered “maybe.” In the *anger* condition, 62% indicated witnesses were present, 28% not present, and 10% answered “maybe.” The likelihood of witnesses being present in the described episode did not vary by condition, $\chi^2(4) = 5.34, p = .254$. When considering only a comparison between humiliation and shame (excluding the anger condition), the Chi-square test on the likelihood of witnesses being present is also nonsignificant, $\chi^2(2) = 4.36, p = .113$. Furthermore, when considering only the distribution of the “yes” versus “no” answers (excluding “maybe”), the Chi-square test is nonsignificant, $\chi^2(2) = 4.71, p = .095$. We can therefore conclude that, although episodes that elicited humiliation often involved the presence of witnesses, so were episodes that triggered anger and shame—something that can be expected, considering that situations that trigger these emotions are often social; as such, the presence of witnesses is a likely possibility. Furthermore, in 26% of the humiliation episodes, no witnesses were present—a percentage that was similar for the case of anger (28% non-public episodes) and shame (33% non-public episodes). Finally, for those episodes that participants had previously classified as public, the ratings of the level of publicity involved did not vary significantly across conditions.

Regarding hostility, results indicated that, as expected, episodes that elicited humiliation and anger were appraised as significantly more hostile than episodes that triggered shame. The level of perceived hostility did not differ significantly between the humiliation and the anger conditions.

Finally, the level of forced internalization was significantly higher in the humiliation, as compared to both the anger and the shame conditions. Forced internalization was also significantly higher in the anger than in the shame condition. Non-forced internalization was significantly higher in both the humiliation and the shame conditions as compared to the anger condition. Humiliation and shame did not differ significantly in the level of non-forced internalization.

All in all, these results confirm that witnesses are often present in humiliation-eliciting episodes, but also show that the importance of this contextual variable for humiliation is not as

determinant as has sometimes been posited (e.g., Klein, 1991; Torres & Bergner, 2012). Indeed, results indicate that hostility is a more determinant trigger of humiliation than witnesses. The zero-order correlations also showed that the degree of publicity that the events gained and the level of hostility perceived in the situation correlated significantly with internalization (particularly with forced internalization). These results go in line with our prediction that witnesses can increase the threat to the self that underlie all negative self-conscious emotions, including humiliation and shame, facilitating that the victim interiorizes a devaluation of the self and, in turn, experiences humiliation.

In the next two experiments, we tested in the laboratory our main hypothesis about an audience enhancing the emotional experience of humiliation (as compared to shame and anger) via the two core appraisals of humiliation. To that end we manipulated the presence of witnesses and the hostile tone of the perpetrator in a humiliation-prone situation.

Experiment 1

To test the causal role that witnesses and hostility had in humiliation (versus shame and anger) via the core appraisals, we asked participants (all psychology students) to imagine they received a demeaning academic assessment from a professor. Then, in a 2x2 between-subjects factorial design, we manipulated the public context of this devaluation (feedback provided in private in the professor's office versus in public in front of the whole class) and the hostile tone of the professor's feedback. We measured the key appraisals of humiliation (i.e., internalizing and unfairness) and participants' emotions (humiliation, shame, and anger).

We expected witnesses and hostility to indirectly affect humiliation via the two core appraisals that underlie humiliation, whereas shame and anger would be indirectly affected only via the respective appraisal they share with humiliation (i.e., anger via unfairness and shame via internalization). Because we expected the combination of witnesses and hostility to be particularly humiliating, we hypothesized an interaction of the two factors on humiliation, so that the effect of hostility on humiliation would be particularly strong in the presence of witnesses.

Method

Participants

We used G*Power (Faul et al., 2009) to conduct an a priori power analysis. Based on the effects' size obtained in our past research using a similar methodology (see Fernández et al., 2018, Study 2), we aimed to detect an effect size of $\eta_p^2 = .025$. We therefore specified for the power analysis an ANOVA with four groups and one degree of freedom, power of .80, $\alpha = .05$, and an effect size of $f = .16$, equivalent to $\eta_p^2 = .025$. The analysis revealed a required sample size of $N = 309$. We recruited 320 undergraduate psychology students (76% women; $M_{\text{age}} = 29.58$, $SD = 9.53$) at National University of Distance Education (UNED) in Spain, who volunteered to participate.

Procedure

Participants were asked to imagine that they were the protagonists of a scenario in which they were required to write an essay in an introductory psychology class. They did the work the best they could and got back a negative evaluation together with a message from the professor. To manipulate the publicity factor, we used the respective version of the following text: "*The professor communicates the grade to each student in class (vs. in his office), in a public (vs. non-public) way, so that the whole class (vs. only you and the professor) will know your grade and the comments that the professor makes to justify it.*" To manipulate hostility, we varied the message of the professor accompanying the evaluation in the following terms contingent on the hostile vs. non-hostile (between brackets) conditions: "*The level of the ideas presented by the student is bordering on stupidity (vs. very poor). Some of the ideas seem ridiculous (vs. too basic) when considering they came from a university student. From an academic point of view, the given answers leave much to be desired (vs. are insufficient)*". We then asked participants to answer a questionnaire with the measures detailed below imagining the described situation was really happening to them.

Measures

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

Key Appraisals. To measure the *unfairness appraisal*, participants indicated whether they thought the received evaluation was “unjust,” “unethical,” and “fair” (reverse coded),² $\alpha = .71$. To measure the *internalization appraisal*, participants answered the following four items: “The feedback...” “(1)...reduced my self-esteem as a student,” “(2)...reinforces my confidence in myself as a psychology student” (reverse coded), “(3)...reinforces my confidence in my abilities as a student” (reverse coded), and “(4)...strengthens the ‘psychology student aspect of my identity’” (reverse coded), $\alpha = .77$.

Discrete Emotions. We asked participants to indicate on a sliding scale, from 0 (not at all) to 100 (extremely), the extent to which they felt *humiliation* (*humillación*), *shame* (*vergüenza*), and *anger* (*ira*).

Manipulation Checks. We used four items (e.g., “My evaluation will be made public,” $\alpha = .91$) to check the publicity manipulation, and three (e.g., “Regardless of the grade I got, I found the evaluator’s comments to be hostile,” $\alpha = .82$) to check the hostility manipulation.

Results

We conducted a series of Publicity x Hostility ANOVA on all dependent variables (i.e., manipulation checks, appraisals and emotions), followed up by *t*-tests on given paired means. Table 3 summarizes the results of these analyses, including the descriptive statistics by conditions. Table 4 shows the correlations among the manipulated factors, the appraisals and the emotions.

Manipulation Checks

Publicity. Results on the publicity manipulation check yielded a significant main effect of publicity, a nonsignificant main effect of hostility, and a nonsignificant interaction (see Table 3 for statistics). Publicity scores were significantly higher in the public ($M = 5.35$, $SD = 1.84$) than in the non-public condition, $M = 1.89$, $SD = 1.28$, $d = 2.20$.

Hostility. Results on the hostility manipulation check yielded a significant main effect of hostility, a significant main effect of publicity, and a nonsignificant interaction. Hostility scores were significantly higher in the hostile ($M = 5.26$, $SD = 1.41$) than in the non-hostile condition ($M = 4.24$, $SD = 1.67$, $d = .67$), and in the public ($M = 5.18$, $SD = 1.48$) as compared to the non-public condition, $M = 4.34$, $SD = 1.66$, $d = .54$. This last result indicated that our participants perceived the fact of the professor communicating (vs. not doing so) the grades in front of the class as a more hostile act.

Effects of Publicity and Hostility on Appraisals and Emotions

Appraisals. Results on the unfairness appraisal yielded a significant main effect of publicity, a nonsignificant main effect of hostility, and a nonsignificant interaction (see Table 3 for statistics). As expected, the professor's evaluation was appraised as more unfair in the public ($M = 4.44$, $SD = 1.36$) than in the non-public condition, $M = 3.90$, $SD = 1.29$, $d = .40$. There were no significant effects on the internalization appraisal.

Emotions. Results on humiliation yielded two significant main effects for publicity and hostility. Humiliation was significantly higher in the public ($M = 64.21$, $SD = 32.34$) than in the non-public condition, $M = 55.69$, $SD = 32.75$, $d = .26$, and in the hostile ($M = 64.18$, $SD = 31.61$) as compared to the non-hostile condition, $M = 55.55$, $SD = 33.48$, $d = .27$. Contrary to our predictions, the interaction on humiliation was nonsignificant. Results on shame yielded a significant main effect of publicity, a nonsignificant main effect of hostility, and a nonsignificant interaction. Shame was significantly higher in the public ($M = 70.29$, $SD = 29.03$) than in the non-public condition, $M = 61.61$, $SD = 29.80$, $d = .30$. There were no significant effects on anger.

Indirect effects of Publicity and Hostility on the Emotions via the Appraisals

To test the indirect effects (IE) predicted in our hypotheses, we used the Lavaan package in R to fit a path model in which the two independent variables (i.e., publicity and hostility) were the exogenous predictors, the two key appraisals (unfairness and internalization) were the mediators, and

the three target emotions (humiliation, shame, and anger) were the outcome variables (see Figure 1). As expected, publicity significantly affected humiliation via unfairness ($b = 4.11, p = .002$). The same indirect path was significant for anger ($b = 2.72, p = .008$). The expected IE of hostility on humiliation via unfairness was nonsignificant ($p = .178$). Since internalization was neither significantly related to publicity ($p = .15$) nor to hostility ($p = .23$), the predicted IE of publicity on humiliation and shame via internalization were nonsignificant ($ps = .159$ and $.164$, respectively), as were the other four possible IE's via this appraisal ($ps > .181$). As for the rest of the model, the pattern of relationships was consistent with our hypothesis, with humiliation being significantly related to unfairness ($b = 7.92, p < .001$) and internalization ($b = 9.25, p < .001$), and shame only to internalization ($b = 7.33, p < .001$), but not to unfairness ($p = .320$). As expected, anger was significantly related to unfairness ($b = 5.24, p < .001$); unexpectedly, though, the relationship between internalization and anger was also significant ($b = 5.02, p < .001$). This relationship was however significantly weaker than the relationship of internalization with humiliation ($\Delta\chi^2(1) = 9.74, p = .002$).

Discussion

The results of Experiment 1 partially confirmed our hypothesis: in line with our predictions, a devaluation perpetrated in front of an audience was perceived as more unfair than a devaluation perpetrated without the presence of witnesses. Indeed, as indicated by our manipulation checks, our participants perceived being publicly devalued as an act of hostility almost to the same degree as being insulted by the professor when giving the feedback. Publicity had, therefore, not only a direct effect on humiliation, increasing its intensity, but also an indirect effect via unfairness. In this regard, humiliation resembled anger, which was also indirectly related to publicity via unfairness. Also in line with our predictions, the underlying effect of publicity on humiliation and anger via unfairness was not present in shame, as shame was not significantly related to unfairness. Shame was significantly affected by publicity, but not because of the unfairness component.

However, our results did not support our predictions of publicity also affecting humiliation indirectly via the internalization appraisal, as the effect of publicity on internalization was nonsignificant. Nevertheless, results showed, a tendency in this direction, with a higher mean of internalization in the public than in the non-public condition, although this difference did not reach statistical significance. The expected Publicity x Hostility interaction on humiliation was also nonsignificant. We think the scenario methodology could have hampered participants from being affected by publicity in the internalization appraisal, as they probably underestimated the power that a situational factor such as the presence of an audience could have on their self-concepts. We therefore ran an experiment similar to Experiment 1 yet with a more realistic paradigm to induce the emotions in the laboratory.

Experiment 2

Employing the same procedure that was successfully used in previous research to trigger humiliation, shame, and anger in the laboratory (Fernández et al., 2018), we reproduced the scenario described in Experiment 1 in the laboratory, so that participants experience it as real. We employed the same 2 (publicity) x 2 (hostility) design in a more realistic way, including the same dependent variables as in Experiment 1. We included behavioral measures in this experiment with the aim to study the reactions of our participants in relation with the emotions.

Method

Participants

We used G*Power (Faul et al., 2009) to conduct a similar power analysis as in Experiment 1. Given the more realistic setting employed in the present experiment, we specified a higher effect size as in the previous study ($\eta_p^2 = .035, f = .20$). The analysis revealed a required sample size of $N = 199$. We recruited 240 undergraduate psychology students (79% women; $M_{age} = 30.98, SD = 10.00$) at National University of Distance Education (UNED) in Spain, who volunteered to participate in the study.

Procedure

We employed a procedure, adapted from Harmon-Jones and Sigelman (2001), of inducing humiliation, shame, and anger in the laboratory (see Fernández et al., 2018, Study 3). We first asked participants, who were led to think that the experiment concerned the psychological aspects involved in anonymous academic evaluation, to type 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?” Then, we told them that one of 10 anonymous and randomly assigned professors of the Psychology Department, who were allegedly connected online to the system, was going to evaluate their responses. Actually, no such evaluator existed and, after 7 minutes of waiting time (during which they played a game of solitaire in the computer), all participants received a grade of 3.8 points on a scale of 0 to 10, and a negative written feedback message accompanying this numerical grade. Participants were then randomly assigned to either a public or a non-public condition.

To manipulate publicity, we had contacted all participants a few days before the experiment, asking them to sign into an online community within the virtual campus of the university that was created for the purpose of this study. We explained to them that we were going to use this online community as a means of communicating aspects related to the study and that, in order to make this communication more fluent, they all were invited to briefly introduce themselves by stating their names and the reasons why they chose to study psychology.³ In reality, we used the existence of this virtual community only for the purpose of manipulating publicity: In the public condition, once the evaluation was allegedly ready, we told participants that the evaluation they were about to receive was going to be published with their name on this online community so that the rest of participants could read it as well. In the non-public condition, we told participants that the evaluation was private (i.e., no one but the evaluator and the participant him/herself would know about it). Participants were then also randomly assigned to either a hostile or a non-hostile condition, and received either the

hostile or the non-hostile version of the same feedback message we used in Experiment 1. Finally, participants were thoroughly debriefed by an experimenter. The UNED Bioethics Committee approved the research and its method.

Measures

We used the same items as in Experiment 1 to measure unfairness ($\alpha = .74$), internalization ($\alpha = .77$), and the discrete emotions. With the aim to study the behavioral responses more strongly related to humiliation (as compared to shame and anger), we further measured whether participants approached or avoided the source of the devaluation (i.e., the professor). To this end, we offered participants the opportunity to send complaint letters to the professor and to the Student Ombudsman. We then analyzed whether they did or not, whether they did it anonymously or nominally, and the content and tone of this complaints. Additionally, we asked participants to grade from 0 (very poor) to 10 (excellent) the work “as an evaluator” done by their particular evaluator and used the same task used in Fernandez et al. (2018, Study 3) to capture the extent to which participants displayed hostility toward their evaluator. For economy of space reasons, more details about these measures and the results concerning them are provided in the supplemental materials. Finally, we used the same items as in Experiment 1 to check both manipulations ($\alpha s > .85$) and included the following item to check whether participants’ perception of the negativity of the received evaluation was similar across conditions: “From an academic point of view, the evaluation I got was negative.”

Results

Table 5 summarizes the results of the analyses conducted to test the effects of the manipulations on our dependent variables, including the descriptive statistics by conditions. Table 6 shows the correlations among the variables.

Manipulation checks

Publicity. Results on the publicity manipulation check yielded a significant main effect of publicity, a nonsignificant main effect of hostility, and a nonsignificant interaction (see Table 4 for statistics). Participants perceived the feedback significantly more public in the public ($M = 4.24$, $SD = 1.68$) than in the non-public condition, $M = 2.32$, $SD = 1.51$, $d = 1.20$.

Hostility. Results on the hostility manipulation check yielded a significant main effect of hostility, a nonsignificant main effect of publicity, and a nonsignificant interaction. Participants perceived the feedback as significantly more hostile in the hostile ($M = 5.54$, $SD = 1.30$) than in the non-hostile condition, $M = 3.44$, $SD = 1.73$, $p < .001$, $d = 1.13$.

Negativity of the evaluation. Results on this manipulation check did not reveal any significant effects.

We therefore concluded that our manipulations of publicity and hostility were effective and that the feedback was perceived equally downgrading across conditions.

Effects of Publicity and Hostility on Appraisals and Emotions

Key Appraisals. Consistent with Experiment 1, results on the unfairness appraisal yielded a significant main effect of publicity, a significant main effect of hostility, and a nonsignificant interaction. As expected, participants appraised the evaluation as more unfair in the audience ($M = 3.92$, $SD = 1.45$) than in the non-audience evaluation, $M = 3.56$, $SD = 1.52$, $d = .24$. Participants also appraised as more unfair the hostile ($M = 4.22$, $SD = 1.49$) than the non-hostile evaluation, $M = 3.27$, $SD = 1.34$, $d = .67$. Results on the internalization appraisal yielded a significant interaction only, with no significant main effects. In the public condition, hostility had a significant effect on internalization, suggesting that a hostile (vs. non hostile) remark had a greater impact in public, $F(1, 119) = 8.57$, $p = .004$, $\eta_p^2 = .07$. In the non-public condition, the effect of hostility on internalization was nonsignificant, $F(1, 119) = .38$, $p = .54$, $\eta_p^2 = .00$ (see Figure 2). This, however, does not mean there was no internalization in the non-public condition, as the means of internalization in the non-

public conditions were also high (see Table 5). That is, in line with our theorizing, publicity—when combined with hostility—increased the internalization of the devaluation.

Emotions. Results on humiliation yielded a significant main effect of hostility, a nonsignificant main effect of publicity, and a significant interaction. Consistent with prior work (Fernández et al., 2018), humiliation was significantly higher in the hostile ($M = 54.77$, $SD = 33.13$) than in the non-hostile condition, $M = 38.39$, $SD = 32.56$, $d = .50$. As with internalization, the significant interaction effect on humiliation suggested that a hostile (vs. non hostile) devaluation evoked more humiliation in public, $F(1, 119) = 19.17$, $p < .001$, $\eta_p^2 = .14$. In the non-public condition, the effect of hostility on humiliation was nonsignificant, $F(1, 119) = 1.68$, $p = .20$, $\eta_p^2 = .01$ (see Figure 2). Again, as with internalization, this does not mean that the level of humiliation was low in the non-public conditions (see Table 5 for statistics).

Results on anger revealed a significant main effect of hostility, a nonsignificant main effect of publicity, and a nonsignificant interaction. Anger was significantly higher in the hostile ($M = 30.14$, $SD = 30.65$) than in the non-hostile condition $M = 20.98$, $SD = 26.80$, $d = .32$. Finally, results on shame yielded no significant effects.

Direct and Indirect Effects of Publicity and Hostility on the Emotions via the Appraisals

We used the Lavaan package in R to fit a model similar to the one we used in Experiment 1. Because the expected Publicity x Hostility interaction on humiliation was significant, we included in this model this interaction term as a third exogenous variable, together with the two experimentally manipulated factors, so that the model could more clearly reflect the processes underlying the effects on the emotions (see Figure 3). In line with our theorization, the interaction term Publicity x Hostility increased humiliation via the internalization appraisal (IE: $b = 2.04$, $p = .022$). Publicity also exerted the expected effect on humiliation via the unfairness appraisal, though this time the effect was only marginally significant (IE: $b = 0.78$, $p = .083$).

Publicity had also a significant indirect effect on anger via unfairness (IE: $b = 1.44, p = .045$). The interaction term Publicity x Hostility exerted a significant indirect effect via internalization on shame (IE: $b = 2.26, p = .021$). The interaction term Publicity x Hostility had an unpredicted significant indirect effect on anger via internalization (IE: $b = 0.93, p = .045$) which, however, was weaker than the expected indirect effect on humiliation and shame. Moreover, in line with our hypotheses, internalization was significantly more strongly related to humiliation and shame than to anger, $\Delta s\chi^2(1) > 11.94, p < .001$, whereas the relationships between internalization and humiliation, on the one hand, and internalization and shame, on the other, did not differ significantly in strength, $p = .44$.

As for the rest of the effects, the path model nicely replicated the results of our previous research (see Fernández et al., 2018), with hostility exerting a significant indirect effect via unfairness on humiliation (IE: $b = 1.96, p = .008$) and anger (IE: $b = 3.63, p < .001$). The relationship between unfairness and shame was negative, as it was the resulting indirect effect of hostility on shame via unfairness (IE: $b = -1.87, p = .016$). Unfairness was more strongly related to humiliation and anger than to shame, $\Delta s\chi^2(1) > 35.80, p < .001$, and more to anger than to humiliation, $\Delta\chi^2(1) > 5.74, p = .017$.

Discussion

The results of Experiment 2 supported our main hypothesis about the important enhancing role that witnesses play in triggering humiliation via its core appraisals. As expected, the presence of witnesses increased the appraisal of unfairness, which in turn affected humiliation indirectly. Also as expected, the presence of witnesses, when combined with hostility in a situation that threatens the self, facilitated participants' internalization of a devaluation of one's self, which, in turn, increased the experience of humiliation. In line with the idea that the presence of an audience is not crucial for humiliation to arise, the results of Experiment 2 further showed that the presence of witnesses by itself (i.e., without the combination of hostility) did not have a significant main effect on humiliation

nor on internalization. All in all, these results confirmed our main hypothesis about witnesses playing an important role in triggering humiliation via the two core appraisals.

In regard to the role of hostility, we replicated previous results showing a strong significant main effect of hostility on unfairness and on humiliation (Fernández et al, 2018). Our results also replicated the expected indirect effect of hostility on humiliation via unfairness. One detail of the results regarding hostility, though, was contrary to our previous findings and expectations: the results of the ANOVA on humiliation yielded a significant Publicity x Hostility interaction, which was accounted for by the expected particularly strong effect of hostility on humiliation in the public, as compared to the non-public, condition. However, and contrary to previous results, the effect of hostility on humiliation in the non-public condition did not reach significance. Our previous findings showed that hostility had a particularly strong effect on humiliation, even in the absence of witnesses. This lack of effect of hostility on humiliation in the nonpublic condition should not be interpreted, however, as a lack of humiliation when participants were hostilely devalued in the absence of witnesses. Indeed, as the descriptive statistics show, the level of humiliation in the hostile-non-public condition was quite high.

General Discussion

Since Klein (1991) referred to witnesses as the third component of the prototypical experience of humiliation, several authors have signalized this situational factor as a critical characteristic of humiliation (e.g. Combs et al., 2010; Elison & Harter, 2007; Elshout et al., 2017; Torres & Bergner, 2012). And, indeed, the results of the present research showed that being devalued in the presence of witnesses plays a particularly important role in triggering humiliation (i.e., more important than in shame or anger) by enhancing this emotional experience. The main contribution of the present research is to show why this is so, i.e., through which psychological process witness presence exerts its effect on humiliation. In this regard, results of Experiment 1 showed that being devalued in the presence of an audience (as compared to being devalued in a non-public setting)

increased victim's unfairness appraisal, which in turn related significantly to humiliation. This indirect path (i.e., publicity->unfairness->emotion) was common to humiliation and anger, but not to shame. Results of Experiment 2 replicated this finding and also showed that the presence of witnesses interacted with hostility, increasing the other core appraisal of humiliation (i.e., internalization), which in turn related significantly to humiliation. This indirect path (Publicity x Hostility->internalization->emotion) was particularly strong in the case of humiliation and shame. Throughout this double path, the presence of witnesses together with the hostile tone of the perpetrator indirectly enhanced the emotional experience of humiliation. Publicity also indirectly affected shame and anger, but its effect on these two emotions was smaller because it was exerted via the single appraisal that each of these emotions shares with humiliation (internalization and unfairness, respectively).

Interestingly, the path via internalization became significant only in the experiment conducted with the realistic methodology (Experiment 2). In contrast, in Experiment 1, in which participants had to imagine how they would experience a devaluation perpetrated in front of an audience (but did not experience it as real, as it was the case of Experiment 2), the path via internalization was nonsignificant, mainly due to the lack of a significant effect of the manipulated factors on internalization. This lack of effect of publicity and hostility on internalization when the methodology was based on imagined scenarios may well be due to our participants underestimating the power that situational factors may exert on internal psychological processes.

The present research also contributes to clarify what the effect of witness presence is by itself, independently of other variables crucial for humiliation. Other authors who have recently studied the effect of an audience on humiliation have linked this contextual factor to the mocking tone of this audience (see, for instance, Mann et al., 2017), which makes it difficult to discern what specific effect the mere presence of an audience has on humiliation. By mixing the audience effect with that of its hostile or disrespectful tone, these works have tended to overemphasize the relevance

of the audience factor itself. In this regard our research shows that the effect of the publicity factor by itself is important, as it indirectly affects humiliation via unfairness, but not as crucial as sometimes could be inferred from the existing literature (e.g., Klein, 1991), as it is only when combined with hostility when the presence of witnesses exerted its particularly strong effect on humiliation.

The results of our preliminary study, in which participants described episodes of their lives in which they felt humiliation versus shame versus anger, served as well to clarify to what extent the presence of witnesses is particularly characteristic of humiliation. In this sense, our results showed that around one third of the episodes that elicited humiliation took place in dyadic settings (i.e., without witnesses), as was the case for shame and anger. Thus, our results indicated that the presence of an audience that witnesses the emotion-triggering events was as characteristic of episodes that elicited humiliation as of those eliciting shame or anger. In contrast, hostility differentiated episodes that elicited humiliation from those that elicited shame, which goes in line with the idea that hostility is a more crucial component of humiliation than other situational factors such as the presence of witnesses or the status of the perpetrator (see Fernández et al, 2018).

We think that, overall, these results show that humiliation can occur with or without witnesses present and with or without hostility. Indeed, we can feel exposed in situations that involve no witnesses (for instance, in the intimacy of a personal relationship or in a vis-à-vis interaction with a professor) and we can experience a threat to the self in circumstances in which we have been unfairly demeaned without hostility (for instance, when a professor devalues our work with courtesy). Whether we would feel humiliation, shame, or anger would depend on whether the threat to the self breaks the psychological mechanisms that usually protect our self-esteem (facilitating therefore the internalization of a devaluation of the self) and on how we appraise the situations in terms of fairness. Importantly, our results show that situational factors such as the presence of

witnesses and the hostility of the devaluation facilitate the cognitive process that underlies humiliation in particular.

One limitation of the present research is that in Experiments 1 and 2 we focused on a particular setting in which a perpetrator demeans a victim with more or less hostility. Although hostility and the presence of a perpetrator have been identified as crucial variables for humiliation (Elison & Harter, 2007; Fernández et al., 2015, 2018), it may be possible for someone to feel humiliated without suffering a hostile treatment inflicted by a perpetrator. In this regard, the work of Combs et al. (2010), which studies humiliation in the context of a moral transgression with no hostile perpetrator being present, complements well our approach. These authors found that participants thought that the target would feel more humiliation when a professor reprimanded the target for the wrongdoing than when no one noticed about it. The authors attributed this effect to publicity, i.e., the publicity that the presence of someone who rebukes the target introduces in the situation as compared to a situation in which nobody discovers the wrongdoing. In our understanding of humiliation, however, we think this effect had more to do with the presence of a *humiliator* than with publicity. That is, we see humiliation as a victim-related emotion in which a perpetrator and a victim are crucial components of the typical humiliating situation. In this regard, the effect that Combs and colleagues attribute to publicity is not the same as the one we have studied in the present research, which refers to the enhancing role witnesses have on triggering the emotion experienced by a victim when s/he is demeaned by a perpetrator (that is, in our conditions there was always at least one person other than the victim; this person was the perpetrator). More research should be done in this direction to study the effect that variables such as the type and characteristics of the situation (e.g., with or without hostility) and/or of the witnesses (e.g., personally related to the victim versus strangers) may have on humiliation.

Finally, the likely existence of cultural differences in the experience of humiliation (as well as of shame and anger) should be taken into account. Our results come from Spain, which is considered

an honor culture (Rodríguez-Mosquera et al., 2004), and this probably affects both the sensitivity to humiliation-prone situations and the kind of approach or avoidance reactions in the victims.

Conclusion

To conclude, in line with the existing literature (Combs et al., 2010; Elison & Harter, 2007; Mann et al., 2017), in the present research we have found that witnesses play a particularly relevant role in enhancing the emotional experience of humiliation. Moreover, going beyond previous research, we have experimentally proved that this effect is explained by two processes: the presence of an audience makes the victim perceive the underlying devaluation as more unfair and, when this devaluation is accompanied by hostility, the presence of third-party observers witnessing the episode also facilitates the internalization of such devaluation. However, this does not mean that this unfair internalization rarely occurs in an interpersonal context. As our results here show, humiliation often takes place in settings that do not involve third-party observers.

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Footnotes

1. We controlled for gender and minority status because preliminary analyses described in the supplemental materials indicated that these two variables affected several measures.

2. In order to conceal the objective of the experiment, we mixed the following items among those used to measure each dependent variable: “educational” and “well-intentioned” (mixed with items to measure the *unfairness appraisal*); “The feedback helped me to identify areas of improvement” (*internalization appraisal*); “joy”, “satisfaction”, and “pride” (discrete emotions).

3. Because the university where we conducted the study is a distance-learning school, all students have a personal digital profile for participating in the virtual campus, which includes their full names and a profile picture.

Table 1

Descriptive Statistics by Condition and Results of the ANOVAs Controlling for Gender and Minority Status on the Continuous Dependent Variables, Preliminary Study

	Humiliation	Shame	Anger	Omnibus test	Humiliation vs. Shame	Humiliation vs. Anger	Shame vs. Anger
Degree of publicity	4.12 (1.85)	3.86 (1.91)	4.20(1.89)	$F(2,644) = 1.95, p = .14, \eta_p^2 = .01$	$p = .34$	$p = .88$	$p = .16$
Forced internalization	4.57 (1.83)	2.81 (1.90)	3.67 (1.87)	$F(2,939) = 69.04, p < .001, \eta_p^2 = .13$	$p < .001$	$p < .001$	$p < .001$
Non-forced internalization	3.55 (1.88)	3.54 (1.80)	2.96 (1.88)	$F(2,932) = 9.82, p < .001, \eta_p^2 = .02$	$p = .99$	$p < .001$	$p < .001$
Hostility	4.01 (2.05)	2.38 (1.85)	3.76 (2.13)	$F(2,939) = 59.31, p < .001, \eta_p^2 = .11$	$p < .001$	$p = .27$	$p < .001$

Note. The effect of the covariable *gender* was significant on non-forced internalization ($F = 5.16, p = .023$) and marginally significant on forced internalization ($F = 3.11, p = .078$); the effect of *gender* was nonsignificant on degree of publicity and hostility, $ps > .17$. The effect of the covariable *minority status* was significant on non-forced internalization ($F = 4.93, p = .027$) and hostility ($F = 6.58, p = .010$); it was nonsignificant on degree of publicity and forced internalization, $ps > .18$.

Table 2

Correlations among the Continuous Dependent Variables, Preliminary Study

	1	2	3	4
1. Degree of publicity	-			
2. Forced internalization	.23**	-		
3. Non-forced internalization	.17**	.47**	-	
4. Hostility	.23**	.64**	.18**	-

Note: ** $p < .001$

Table 3.

Descriptive Statistics and Results of the 2(Publicity: public vs. non-public) x 2(Hostility: hostile vs. non-hostile) ANOVAs on each Dependent Variable, Experiment 1

	Descriptive statistics: <i>Mean (SD)</i>				ANOVA, <i>F</i> s(1,316)		
	Public devaluation		Non-public devaluation		Main effects		Interaction
	Hostile	Non-hostile	Hostile	Non-hostile	Publicity	Hostility	
Unfairness	4.44 (1.34)	4.44 (1.39)	4.12 (1.27)	3.71 (1.30)	$F = 12.38, p < .001, \eta_p^2 = .04$	$F = 1.87, p = .17, \eta_p^2 = .01$	$F = 1.79, p = .18, \eta_p^2 = .01$
Internalization	5.17 (1.19)	5.13 (1.29)	5.09 (1.23)	4.80 (1.30)	$F = 2.08, p = .15, \eta_p^2 = .01$	$F = 1.43, p = .23, \eta_p^2 = .00$	$F = 0.76, p = .39, \eta_p^2 = .00$
Humiliation	67.01 (30.03)	60.78 (34.87)	60.87 (33.26)	51.12 (31.79)	$F = 4.73, p = .03, \eta_p^2 = .02$	$F = 4.84, p = .03, \eta_p^2 = .02$	$F = 0.23, p = .63, \eta_p^2 = .00$
Shame	72.66 (27.91)	67.40 (30.29)	65.35 (29.35)	58.32 (29.98)	$F = 6.20, p = .01, \eta_p^2 = .02$	$F = 3.48, p = .06, \eta_p^2 = .01$	$F = 0.07, p = .79, \eta_p^2 = .00$
Anger	48.80 (31.45)	46.19 (30.26)	49.91 (32.07)	46.69 (31.39)	$F = 0.05, p = .82, \eta_p^2 = .00$	$F = 0.68, p = .41, \eta_p^2 = .00$	$F = 0.01, p = .93, \eta_p^2 = .00$
MC ¹ Publicity	5.34 (1.94)	5.36 (1.72)	2.09 (1.46)	1.71 (1.06)	$F = 378.55, p < .001, \eta_p^2 = .55$	$F = 1.03, p = .31, \eta_p^2 = .00$	$F = 1.32, p = .25, \eta_p^2 = .00$
MC ¹ Hostility	5.47 (1.32)	4.82 (1.59)	5.01 (1.48)	3.74 (1.58)	$F = 21.22, p < .001, \eta_p^2 = .06$	$F = 32.91, p < .001, \eta_p^2 = .09$	$F = 3.46, p = .06, \eta_p^2 = .01$

¹ MC = Manipulation check

Table 4

Zero-Order Correlations among the Variables, Experiment 1

	1	2	3	4	5	6	7
1. Publicity	-						
2. Hostility	.08	-					
3. Unfairness	.20***	.09	-				
4. Internalization	.09	.07	.23***	-			
5. Humiliation	.13*	.13*	.42***	.44***	-		
6. Shame	.15*	.12*	.15**	.34***	.63***	-	
7. Anger	-.01	.05	.26***	.25***	.54***	.31***	-

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 5

Descriptive Statistics and Results of the 2(Publicity: public vs. private) x 2(Hostility: hostile vs. non-hostile) ANOVAs on each Dependent

Variable, Experiment 2

	Descriptive statistics: Mean (SD)				ANOVA, $F_s(1,236)$		
	Public devaluation		Non-public devaluation		Main effects		Interaction
	Hostile	Non-hostile	Hostile	Non-hostile	Publicity	Hostility	
Unfairness	4.48 (1.36)	3.40 (1.34)	3.97 (1.58)	3.14 (1.35)	$F = 4.36, p = .04, \eta_p^2 = .02$	$F = 27.50, p < .001, \eta_p^2 = .10$	$F = 0.46, p = .50, \eta_p^2 = .00$
Internalization	5.05 (1.29)	4.35 (1.35)	4.61 (1.50)	4.78 (1.42)	$F = 0.00, p = .97, \eta_p^2 = .00$	$F = 2.25, p = .14, \eta_p^2 = .01$	$F = 5.84, p = .02, \eta_p^2 = .02$
Humiliation	60.55 (31.28)	35.77 (30.69)	49.26 (34.15)	41.14 (34.47)	$F = 0.49, p = .48, \eta_p^2 = .00$	$F = 15.19, p < .001, \eta_p^2 = .06$	$F = 3.89, p = .05, \eta_p^2 = .02$
Shame	58.13 (32.86)	46.86 (32.43)	47.05 (35.86)	52.52 (37.25)	$F = 0.36, p = .55, \eta_p^2 = .00$	$F = 0.42, p = .52, \eta_p^2 = .00$	$F = 3.50, p = .06, \eta_p^2 = .02$
Anger	34.47 (30.03)	20.97 (26.80)	26.02 (30.90)	21.00 (27.03)	$F = 1.29, p = .26, \eta_p^2 = .01$	$F = 6.22, p = .01, \eta_p^2 = .03$	$F = 1.31, p = .25, \eta_p^2 = .01$
MC ¹ Publicity	4.24 (1.69)	4.23 (1.68)	2.46 (1.61)	2.18 (1.40)	$F = 86.08, p < .001, \eta_p^2 = .27$	$F = 0.52, p = .47, \eta_p^2 = .00$	$F = 0.44, p = .51, \eta_p^2 = .00$
MC ¹ Hostility	5.89 (1.08)	4.41 (1.52)	5.83 (1.00)	4.52 (1.26)	$F = 0.02, p = .90, \eta_p^2 = .00$	$F = 75.88, p < .001, \eta_p^2 = .24$	$F = 0.29, p = .59, \eta_p^2 = .00$
MC ¹ Perceived evaluation's negativity	5.74 (1.93)	5.98 (1.66)	6.02 (1.71)	6.19 (1.53)	$F = 1.17, p = .28, \eta_p^2 = .01$	$F = 0.87, p = .35, \eta_p^2 = .00$	$F = 0.03, p = .87, \eta_p^2 = .00$

¹ MC = Manipulation check

Table 6

Zero-Order Correlations among the Variables, Experiment 2

	1	2	3	4	5	6	7	8
1. Publicity	-							
2. Hostility	-.03	-						
3. Publicity x Hostility	-.01	.00	-					
4. Unfairness	.12 ⁺	.32 ^{***}	.04	-				
5. Internalization	-.00	.10	.16 [*]	.16 [*]	-			
6. Humiliation	.04	.24 ^{***}	.12 ⁺	.30 ^{***}	.44 ^{***}	-		
7. Shame	.04	.04	.12 ⁺	-.07	.41 ^{***}	.60 ^{***}	-	
8. Anger	.07	.16 [*]	.07	.43 ^{***}	.27 ^{***}	.48 ^{***}	.23 ^{***}	-

Note: + $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

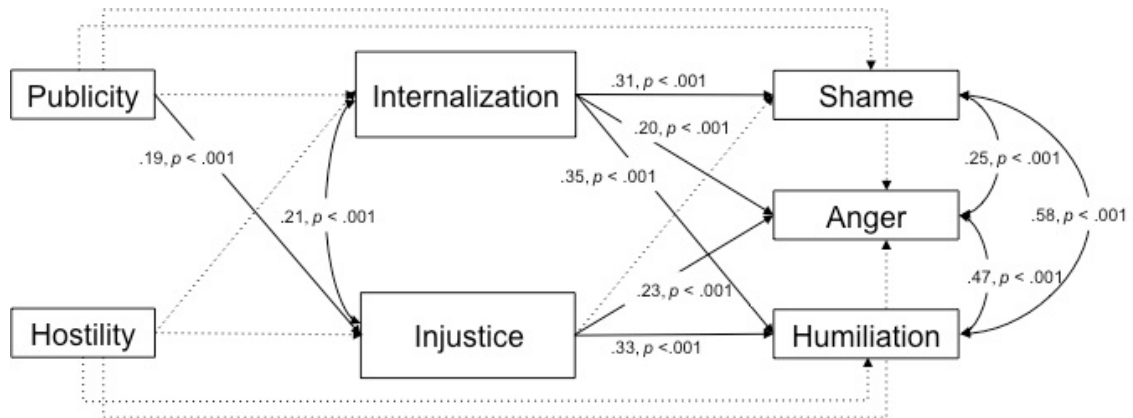


Figure 1. Saturated path model of the effects of publicity and hostility on the key appraisals (i.e., unfairness and internalization) and the emotions (i.e., humiliation, shame, and anger), Experiment 1. Coefficients are standardized and only provided for significant paths and correlations, which are drawn with a thicker continuous line; nonsignificant paths are drawn with a dashed line. $**p < .001$; $*p < .05$.

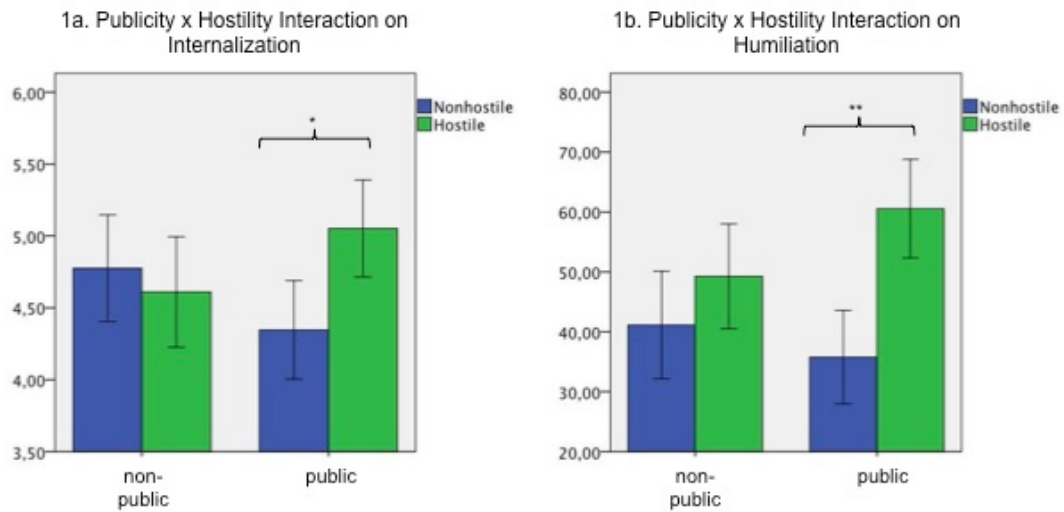


Figure 2. Significant Publicity x Hostility interactions on the internalization appraisal (left side) and humiliation (right side). In both cases, the interaction was accounted by a stronger effect of hostility in the public as compared to the private condition.

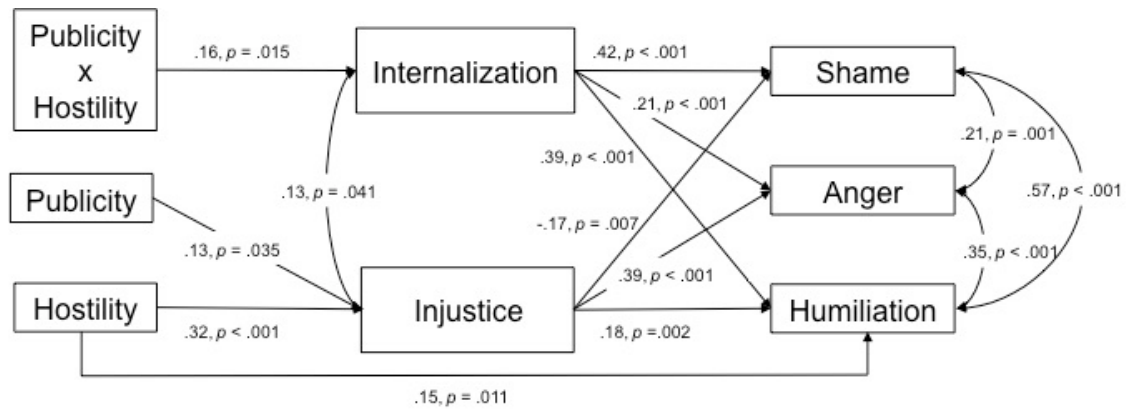


Figure 3. Saturated path model of the effects of publicity, hostility, and the interaction term Publicity x Hostility on the key appraisals (i.e., unfairness and internalization) and the emotions (i.e., humiliation, shame, and anger), Experiment 2. Coefficients are standardized. Only significant paths are drawn. $**p < .001$; $*p < .05$.