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## Faces of Shame: Implications for Self-Esteem, Emotion Regulation, Aggression, and Well-Being

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### ABSTRACT

There is an increasing interest in psychological research on shame experiences and their associations with other aspects of psychological functioning and well-being, as well as with possible maladaptive outcomes. In an attempt to confirm and extend previous knowledge on this topic, we investigated the nomological network of shame experiences in a large community sample ( $N = 380$ ; 66.1% females), adopting a multidimensional conceptualization of shame. Females reported higher levels of shame (in particular, bodily and behavioral shame), guilt, psychological distress, emotional reappraisal, and hostility. Males had higher levels of self-esteem, emotional suppression, and physical aggression. Shame feelings were associated with low self-esteem, hostility, and psychological distress in a consistent way across gender. Associations between characterological shame and emotional suppression, as well as between bodily shame and anger occurred only among females. Moreover, characterological and bodily shame added to the prediction of low self-esteem, hostility, and psychological distress above and beyond the influence of trait shame. Finally, among females, emotional suppression mediated the influence of characterological shame on hostility and psychological distress. These findings extend current knowledge on the nomological net surrounding shame experiences in everyday life, supporting the added value of a multidimensional conceptualization of shame feelings.

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Aggression; emotion regulation; experiences of shame scale; psychological distress; shame; self-esteem; suppression

Shame is commonly defined as an intense negative emotion characterized by the perception of a global devaluation of the self (Tangney & Dearing, 2002). Shame feelings are often triggered by social events in which a drop of personal status or feelings of rejection are perceived. Of note, rather than representing a unidimensional construct, shame could actually refer to different aspects of the self, such as behaviors or body characteristics, as well to the broader identity (Andrews, Qian, & Valentine, 2002; Hejdenberg & Andrews, 2011). Specifically, a multidimensional conceptualization of shame has been proposed (Andrews et al., 2002) to identify: (a) experiences of characterological shame (i.e., regarding personal habits, manner with others, the kind of person one is, and personal skills); (b) experiences of behavioral shame (i.e., referred to doing

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something wrong, saying something stupid, and failing in competitive contexts); and (c) bodily shame (i.e., referred to being ashamed of one's physical appearance). There is substantial evidence linking shame with psychopathology in general, and internalizing symptoms in particular (Andrews et al., 2002; Velotti, Elison, & Garofalo, 2014). Yet, associations between specific experiences of shame and other psychological mechanisms have sparsely been investigated. In the current study, we sought to provide a fine-grained analysis of the nomological network surrounding shame feelings, adopting a multidimensional conceptualization of shame experiences. The concept of nomological network refers to a group of constructs that are theoretically or empirically expected to show consistent linkages, and as such nomological network analysis is used to measure construct validity (Cronbach & Meehl, 1955). Specifically, we aimed at confirming associations between shame feelings and psychopathological distress (Andrews et al., 2002). Furthermore, we sought to expand current knowledge broadening the scope of the nomological network of shame. To this end, we first reviewed prior literature to identify possible correlates of shame experiences.

### ***Shame and Self-Esteem***

Frequent experiences of shame may eventually crystallize into trait-like shame proneness. Trait shame, in turn, involves a particularly painful, and often incapacitating, negative feeling involving a sense of inferiority, hopelessness, and helplessness, as well as a desire to hide personal flaws (Andrews et al., 2002). Accordingly, it has been proposed that experiences of shame are tightly linked with fluctuation in self-esteem, and it is plausible that frequent experiences of shame could be conceptually related to chronically low levels of self-esteem (Elison, Garofalo, & Velotti, 2014). Furthermore, low levels of self-esteem could increase the individual vulnerability to experience negative emotional states, including shame. Accordingly, although the directionality of their association is not clear, several studies have reported a substantial relation between low self-esteem and negative emotions, such as guilt and shame (Garofalo, 2015; Marshall, Marshall, Serran, & O'Brien, 2009). Of note, both self-esteem and negative emotions have been linked to increased aggressive tendencies, yet few studies have empirically tested associations between shame and aggression.

### ***Shame and Aggression***

The link between shame and aggression was proposed by several scholars, and some went so far as to say that all forms of violence are anticipated by feelings of shame and humiliation (Gilligan, 1996). From this perspective, early experiences of rejection and abuse might lead to shame-proneness in adulthood. In turn, individuals with high levels of shame-proneness may believe that resorting to aggression and violence is the only possible way to get rid of their shame feelings. From an evolutionary perspective, the experience of shame early in the development may be later replaced by a condition of chronic anger, adopted as a means to keep others away so that shame feelings cannot be detected or triggered (Farmer & Andrews, 2009). Alternatively, the perception of self-devaluation – which is implicit in shame experiences – may represent the first step of a chain that connects shame and aggression (Elison et al., 2014). Specifically, the

sequence could begin with a devaluation of the self that causes shame; in turn, shame feelings can lead to the experience of substantial anger and to the expression of aggressive behavior towards the source of the initial devaluation (Elison et al., 2014; Velotti et al., 2014). In line with this assumption, in a recent study shame experiences were associated with trait anger, and this relation was accounted for by the role of angry reactions to criticisms (Hejdenberg & Andrews, 2011). Specifically, behavioral shame was linked to both proneness toward angry reactions and trait anger, whereas characterological and bodily shame were only related to angry reactions to criticisms (Hejdenberg & Andrews, 2011). In this chain, maladaptive emotion regulation may play a mediating role (Garofalo, Holden, Zeigler-Hill, & Velotti, 2016; Robertson, Daffern & Bucks, 2012). Yet, this possibility has not been empirically tested so far.

### ***Shame and Emotion Regulation***

Shame is considered among the emotions that are more difficult to regulate (Elison et al., 2014). Of note, the way people regulate emotions has important consequences for their well-being (Gross & John, 2003). Cognitive reappraisal and expressive suppression have been identified among the emotion regulation strategies that people use more often (Gross & John, 2003; Gross & Levenson, 1993). Cognitive reappraisal entails thinking about an upsetting situation from a different angle in order to alter its meaning and modulate its emotional impact. Expressive suppression involves an attempt to inhibit or reduce the outward expression of an ongoing emotional experience (i.e., not showing the emotion that one is feeling). In general, reappraisal and suppression are inversely related to a wide range of outcomes in the domains of subjective well-being, affectivity, and social relationships. Specifically, reappraisal is typically associated with better, and suppression with poorer, outcomes (Gross & John, 2003). A recent experimental study has shown that trait shame was linked with emotional suppression (Lanteigne, Flynn, Eastbrook, & Hollenstein, 2014). This is important, because adopting maladaptive emotion regulation strategies for shame may ultimately lead to both internalizing (e.g., psychological distress) and externalizing (e.g., aggression) psychopathological symptoms (Elison, Pulos, & Lennon, 2006; Velotti et al., 2014). Therefore, it is possible that shame is associated with maladaptive emotion regulation, which in turn may explain the associations that shame has with psychopathological symptoms and aggression.

### ***Overview of the Current Study***

In the present study we sought to: (1) confirm and extend prior research on the nomological network of shame, investigating its associations with measures of psychological distress; self-esteem, aggression, and emotion regulation; and (2) examine the possible mediating role of maladaptive emotion regulation (i.e., emotional suppression) in the association between trait shame and external correlates (i.e., self-esteem, aggression and general psychopathology). Since gender differences in shame experiences (Andrews et al., 2002), emotion regulation (John & Gross, 2003), aggression (Fossati, Maffei, Acquarini, & Di Ceglie, 2003), and psychopathological distress (Prunas, Sarno, Preti, Madeddu, & Perugini, 2012) have consistently been reported, we also examined gender differences in mean levels and patterns of associations.

## Method

### *Participants and Procedures*

The total sample comprised 380 adult participants (66.1% women,  $N = 251$ ) recruited from the community. Participants were recruited by psychology graduate students with a snowball sampling technique: they started recruiting 5 participants from their acquaintances and asked them to recruit participants among their social networks. Men ( $M_{age} = 31.00$ ,  $SD = 11.42$ , range 19–63) were slightly but significantly older than women ( $M_{age} = 28.50$ ,  $SD = 9.88$ , range 18–58),  $t(225.85) = 2.11$ ,  $p = .04$ . All participants were Italian. The majority of participants were university students ( $N = 225$ , 59.2%), whereas 6.3% ( $N = 24$ ) were unemployed, 23.9% ( $N = 91$ ) were employees, 9.5% ( $N = 36$ ) were self-employed, and 1.1% ( $N = 4$ ) were retired. Most participants ( $N = 313$ , 82.4%) reported to be (or to had been in the past) in a significant intimate relationship lasted at least 6 months. Finally, 64 participants (16.8%) did not have children, whereas 316 of them (83.2%) had at least one kid. All participants voluntarily and anonymously took part in the study and provided written informed consent. Participants were administered the questionnaires described below and returned them in a sealed envelope to ensure confidentiality. The local Institutional Review Board formally approved all procedures.

### *Measures*

All measures were self-report Likert-type questionnaires. Participants were administered the Italian versions of the following measures. The translated items of all measures were obtained by the authors of the corresponding published Italian adaptations (see references below).

#### *Experience of Shame Scale (ESS; Andrews et al., 2002)*

The ESS is a 25-item questionnaire designed to capture the experience of shame across three components: characterological shame (sample item: ‘Have you felt ashamed of any of your personal habits?’;  $\alpha = .85$ ), behavioral shame (sample item: ‘Do you feel ashamed when you do something wrong?’;  $\alpha = .85$ ), and bodily shame (sample item: ‘Have you felt ashamed of your body or any part of it?’;  $\alpha = .87$ ). The sum of these three components provides an overall index of shame feelings ( $\alpha = .91$ ). In the present study, the Italian version of the ESS was used (Caretti, Craparo, & Schimmenti, 2010), which substantially replicated the psychometric properties of the original version.

#### *Differential Emotions Scale-IV (DES-IV; Izard et al., 1993)*

The DES-IV consists of 36 items aimed at capturing the frequency of the experience of specific positive and negative emotions in the daily life. For the purpose of this study, only the six items assessing shame (e.g., ‘Feel embarrassed when anybody sees you make a mistake’;  $\alpha = .63$ ) and guilt (e.g., ‘Feel regret, sorry about something you did’;  $\alpha = .68$ ) of the Italian adaptation of the DES-IV (Zavattini et al., 2015) were administered.

#### *Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965)*

The 10-item RSES was used to assess the general level of self-esteem (e.g., ‘On the whole, I am satisfied with myself’). The Italian version of the RSES has shown sound psychometric properties (Prezza, Trombaccia, & Armento, 1997). Cronbach’s alpha was .88 in the present study.

### ***Symptom Checklist-90-Revised (SCL-90-R; Derogatis, 1994)***

The SCL-90-R is a 90-item inventory designed to measure general psychopathological distress suffered in the past month. The SCL-90-R estimates a global index of psychopathology (Global Severity Index, GSI), by averaging all item scores (e.g., ‘To what extent do you feel/have you felt blue in the last month?’), rated on a Likert scale ( $\alpha = .97$ ). The Italian adaptation of the SCL-R-90 was used in this study (Prunas et al., 2012).

### ***Emotion Regulation Questionnaire (ERQ; Gross & John, 2003)***

The 10-item ERQ was administered to assess individual differences in two emotion regulation strategies: cognitive reappraisal (e.g., ‘I control my emotions by changing the way I think about the situation I’m in’;  $\alpha = .87$ ) and expressive suppression (e.g., ‘I keep my emotions to myself’;  $\alpha = .79$ ). For the purpose of this study, we used the Italian version of the ERQ (Balzarotti, John, & Gross, 2010), which has shown adequate psychometric properties.

### ***Aggression Questionnaire (AQ; Buss & Perry, 1992)***

The AQ is a 29-item instrument composed by four subscales: physical aggression (e.g., ‘Once in a while I can’t control the urge to strike another person’;  $\alpha = .83$ ); verbal aggression (e.g., ‘I can’t help getting into arguments when people disagree with me’;  $\alpha = .76$ ); anger (‘I sometimes feel like a powder keg ready to explode’;  $\alpha = .80$ ); and hostility (e.g., ‘When people are especially nice, I wonder what they want’;  $\alpha = .81$ ). The AQ total score represent an index of trait aggression ( $\alpha = .90$ ). The Italian version of the AQ has shown good reliability and validity (Fossati et al., 2003), and has been used in the present study.

## ***Data Analytic Strategy***

Descriptive statistics were computed for all study variables. Gender differences and associations with socio-demographic variables of interest were evaluated with one-way between-groups univariate or multivariate analyses of covariance (i.e., ANCOVA or MANCOVA, respectively). Pillai’s Trace was used as the most robust test statistic, and Partial Eta squared ( $\eta^2_{\text{partial}}$ ) was chosen as an estimate of the effect size of the univariate  $F$  tests. Pearson product-moment correlation coefficients among all measures were calculated. The homogeneity of correlation coefficients across gender was tested using the appropriate  $z$  statistic (Cohen, Cohen, West, & Aiken, 2003). To test whether the ESS scales explained additional variance in previously significant correlates, above and beyond the effect of DES-IV-assessed shame, hierarchical multiple regression analyses were conducted. The Variance Inflation Factor (VIF) was adopted to assess collinearity. Finally, to test the hypothesized indirect effect of shame on both aggression and psychopathological distress through the mediation of maladaptive emotion regulation, hierarchical regression and bootstrap analyses were conducted using the PROCESS Macro for SPSS (Hayes, 2013). All analyses were carried out holding constant the effect of age.

## **Results**

### ***Descriptive Analyses and Gender Differences***

Descriptive statistics and gender differences are presented in Table 1.

**Table 1.** Means, Standard Deviations (*SD*), and Gender Comparisons (Controlling for Age) for All Study Variables (*N* = 380).

	Male participants ( <i>N</i> = 129) Mean ( <i>SD</i> )	Female participants ( <i>N</i> = 251) Mean ( <i>SD</i> )	Whole sample ( <i>N</i> = 380) Mean ( <i>SD</i> )	<i>F</i>	df	$\eta^2$ partial
ESS total score	46.89(11.79)	<b>52.96</b> (12.48)	50.89(12.57)	17.15***	1, 375	.04
ESS characterological	21.63(6.09)	22.73(6.49)	22.36(6.37)	1.37	1, 375	.00
ESS behavioral	18.70(5.15)	<b>20.65</b> (5.41)	19.99(5.40)	9.79**	1, 375	.03
ESS bodily	6.57(2.53)	<b>9.54</b> (3.45)	8.53(3.46)	69.34***	1, 375	.16
DES-IV shame	5.24(1.71)	<b>6.03</b> (2.11)	5.75(2.01)	9.85**	1, 342	.03
DES-IV guilt	6.24(1.75)	<b>6.79</b> (1.97)	6.59(1.91)	4.45*	1, 342	.01
Self-esteem	<b>32.00</b> (4.75)	30.50(5.49)	31.01(5.29)	6.62*	1, 377	.02
SCL-90-R GSI	.54(.38)	<b>.76</b> (.53)	.69(.49)	15.55***	1, 377	.04
ERQ reappraisal	4.71(1.02)	<b>4.97</b> (1.05)	4.88(1.05)	4.93*	1, 377	.13
ERQ suppression	<b>3.70</b> (1.19)	3.18(1.24)	3.36(1.25)	12.98***	1, 377	.03
AQ total score	63.57(16.51)	62.18(15.75)	62.65(16.00)	1.14	1, 377	.00
AQ physical aggression	<b>17.42</b> (6.50)	14.13(5.34)	15.25(5.96)	29.26***	1, 377	.07
AQ verbal aggression	14.37(3.74)	13.67(4.24)	13.91(4.09)	2.59	1, 377	.01
AQ anger	15.47(5.24)	16.09(5.30)	15.88(5.28)	0.82	1, 377	.00
AQ hostility	16.33(5.02)	<b>18.29</b> (5.73)	17.63(5.57)	8.44**	1, 377	.02

Note. ESS = Experience of Shame Scale; DES-IV = Differential Emotions Scale-IV; SCL-90-R = Symptom Checklist-90-Revised; ERQ = Emotion Regulation Questionnaire; AQ = Aggression Questionnaire. Bolded mean values are significantly greater than the corresponding value in the opposite gender.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Females reported an overall greater level of ESS-assessed shame than males, and lower levels of self-esteem. Also, MANCOVA results revealed that there was a statistically significant difference between male and female participants on the combined ESS scale scores,  $F(3, 372) = 26.57$ ,  $p < .001$ , Pillai's Trace = .18,  $\eta^2_{\text{partial}} = .18$ . Specifically, females scored higher than males on behavioral and bodily shame. Females also reported significantly greater levels of DES-IV-assessed guilt and shame, multivariate  $F(2, 340) = 5.12$ ,  $p < .01$ , Pillai's Trace = .03,  $\eta^2_{\text{partial}} = .03$ . A subsequent ANCOVA revealed a significant gender difference on the SCL-90-R GSI score. Furthermore, a significant multivariate effect of gender occurred on the combined ERQ scales,  $F(2, 375) = 9.52$ ,  $p < .001$ , Pillai's Trace = .05,  $\eta^2_{\text{partial}} = .05$ ; in particular, females reported higher levels of cognitive reappraisal, and lower levels of expressive suppression than males. Finally, a significant difference across gender occurred when the AQ subscales were entered as combined dependent variables,  $F(4, 373) = 19.28$ ,  $p < .001$ , Pillai's Trace = .17,  $\eta^2_{\text{partial}} = .17$ , but not when males and females when compared on the AQ total score using an ANCOVA design. When the AQ subscales were considered separately, only two differences reached statistical significance, in opposite directions: males reported higher levels of physical aggression, but lower levels of hostility, than females.

Furthermore, we tested whether levels of shame differed between people with and without children, as well as between people who reported to be (or to had been in the past) in a long lasting romantic relationship and people who did not. Controlling for gender and age, participants with children reported significantly lower scores on the ESS total score,  $F(1, 373) = 3.95$ ,  $p > .05$ ,  $\eta^2_{\text{partial}} = .01$ . However, the multivariate main effect of the parental condition (i.e., children yes/no) on the combined ESS scale scores was only approaching significance,  $F(3, 371) = 2.22$ ,  $p = .08$ , Pillai's Trace = .02,  $\eta^2_{\text{partial}} = .02$ . Specifically, although participants with children reported lower levels of shame on all three dimensions, these differences were significant for characterological shame,  $F(1, 373) = 3.98$ ,  $p < .05$ ,  $\eta^2_{\text{partial}} = .01$ ,



and behavioral shame,  $F(1, 373) = 4.79, p < .05, \eta^2_{\text{partial}} = .01$ . On the other hand, although there was not significant difference on the ESS total score,  $F(2, 372) = 1.49, p > .05, \eta^2_{\text{partial}} = .01$ , a significant multivariate effect between participants with and without a current or past intimate relationship occurred on the combined ESS scales,  $F(6, 742) = 2.57, p < .05$ , Pillai's Trace = .04,  $\eta^2_{\text{partial}} = .02$ . Specifically, controlling for gender and age, individuals who had never had a long lasting intimate relationship reported significantly greater scores of bodily shame,  $F(2, 372) = 4.33, p < .05, \eta^2_{\text{partial}} = .02$ . The analyses in this paragraph were exploratory in nature, to test for associations between the ESS and demographics. However, since an interesting pattern of results occurred, we opted for reporting and discussing them, to stimulate further research in this area.

### **ESS Nomological Network**

Correlation analysis results are displayed in Table 2. Of note, the ESS scales were all strongly related to the ESS total score (controlling for age, partial  $r$ s were .89, .84, and .63 for the characterological shame, behavioral shame, and bodily shame scales, respectively). Further, the ESS scales were significantly associated to each other ( $r$ s ranging between .33 and .60). All ESS scales were significantly and positively related to the DES-IV shame and guilt scales. Of note, homogeneity tests did not show significant differences in correlation coefficient values of any ESS scale with shame *versus* guilt scale from the DES-IV, min.  $z = 0.24$ , max  $z = 1.53$ , all  $ps > .05$ . Conversely, homogeneity tests across gender revealed that only 1 out of 8 pairs of correlation coefficients (12.5%) significantly differed across gender, with the association between bodily shame and guilt being stronger among males ( $z = 2.27, p < .05$ ). All the ESS scales were also significantly and negatively associated with levels of self-esteem. As for the associations between the ESS and the ERQ, no significant correlations were found with cognitive reappraisal. Among females only, a significant positive correlations emerged between emotional suppression and both characterological shame and the ESS total score. Among males, no significant associations occurred between the ESS and the AQ total score; on the other hand, the AQ total score was significantly and positively related to the ESS bodily shame scale and the ESS total score among females. Physical aggression was negatively related with characterological shame among males. Among females, the direction of the association was inverse, but nonsignificant. Of note, correlation coefficients between physical aggression and ESS total and characterological shame scores significantly differed across gender ( $z = 2.12$  and  $2.41$ , respectively, both  $ps < .05$ ). Verbal aggression was only significantly related to characterological shame (negatively) among females. Among females, anger showed a positive association with bodily shame. Moreover, the ESS total and subscale scores were significantly and positively related to hostility across gender. Finally, significant positive correlations were found between all ESS scales and the GSI scale of the SCL-90-R. Overall, only 3 out of 44 comparisons between correlation coefficients (across gender) turned out to be significant (6.82%), suggesting that the patterns of correlations between the ESS scales and external correlates are largely invariant across gender (min.  $z = 0.00$ , max  $z = 1.68$ , all  $ps > .05$ ).

### **Incremental Variance of ESS Dimensions on Relevant Outcomes**

We then tested whether the ESS scales significantly explained a portion of additional variance in self-esteem, hostility, and psychopathological distress (as these were the variables





**Table 2.** Partial Correlations (Controlling for Age) of the ESS Total and Scale Scores with the DES-IV Guilt and Shame Scales, Self-Esteem Level, Emotion Regulation Strategies, and Aggression Dimensions, in Both Male ( $N = 129$ ) and Female ( $N = 251$ ) Participants (Total  $N = 380$ ).

	DES-IV shame	DES-IV guilt	Self-esteem	ERQ reappraisal	ERQ suppression	AQ total	AQ physical aggression	AQ verbal aggression	AQ anger	AQ hostility	SCL-90-R GSI
<i>ESS total</i>											
<i>Females</i>	.45***	.56***	-.42***	.01	.03	.04	-.16 <sup>a</sup>	-.04	.02	.37***	.43***
<i>Males</i>	.51***	.54***	-.51***	-.06	.19**	.16*	.07 <sup>a</sup>	-.12	.07	.41***	.52***
<i>ESS</i>											
<i>Males</i>	.40***	.54***	-.46***	.02	.12	.01	-.21 <sup>a</sup>	-.03	-.01	.34***	.45***
<i>Females</i>	.50***	.59***	-.54***	-.05	.22***	.12	.05 <sup>a</sup>	-.15*	.05	.34***	.52***
<i>ESS behavioral</i>											
<i>Males</i>	.39***	.40***	-.25***	.02	-.04	.06	-.09	-.01	.05	.31***	.26***
<i>Females</i>	.38***	.36***	-.30***	-.01	.12	.09	.03	-.12	-.02	.33***	.33***
<i>ESS bodily</i>											
<i>Males</i>	.33***	.49*** <sup>a</sup>	-.35***	-.04	-.06	.04	-.06	-.10	.01	.29**	.36***
<i>Females</i>	.30***	.28*** <sup>a</sup>	-.37***	-.11	.09	.22	.12	.03	.17**	.33***	.39***

Note. ESS = Experience of Shame Scale; DES-IV = Differential Emotions Scale-IV; ERQ = Emotion Regulation Questionnaire; AQ = Aggression Questionnaire; SCL-90-R = Symptom Checklist-90-Revised; GSI = Global Severity Index scale of the SCL-90-R.

<sup>a</sup>Significant difference in correlation coefficients between male and female participants.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

**Table 3.** Hierarchical Multiple Regression Analyses Predicting Self-Esteem, Hostility, and Psychopathological Distress ( $N = 380$ ).

	Self-esteem B	AQ Hostility $\beta$	GSI $\beta$
<b>Step 1</b>			
Age	.21***	-.20***	-.10
Gender	.13*	-.15**	-.20***
Adjusted R2change	.06***	.06***	.05***
<b>Step 2</b>			
DES-IV shame	-.38***	.60***	.54***
Adjusted R2change	.13***	.33***	.27***
<b>Step 3</b>			
ESS characterological shame	-.39***	-.02	.30***
ESS behavioral shame	-.09	.08	-.08
ESS bodily shame	-.17***	.15**	.18***
Adjusted R2change	.13***	.02**	.10***

Note. AQ = Aggression Questionnaire; GSI = Global Severity Index of the Symptom Checklist-90-Revised; DES-IV = Differential Emotions Scale-IV; ESS = Experience of Shame Scale. Gender was dummy-coded with 0 = females.

most strongly associated at the bivariate level with the ESS scales), above and beyond the influence of DES-IV-assessed shame (see Table 3). None of the VIF values suggested that collinearity among predictors could have biased regression results. Hierarchical multiple regression analyses revealed that, controlling for age and gender, the ESS scales significantly explained a portion of incremental variance in all of the outcomes considered. Specifically, after removing the shared variance among ESS scales, characterological and bodily shame scales significantly and independently predicted self-esteem level (negatively) and global psychopathological distress (positively). Further, bodily shame uniquely and positively predicted hostility, over and above the influence of the shame scale of the DES-IV.

### ***Does Emotional Suppression Account for an Indirect Relationship between Shame and Maladaptive Outcomes?***

Based on partial correlation results (see Table 2), the significance of statistical indirect effects was assessed only among female participants (i.e., because among males the association between shame and emotional suppression was not significant, ruling out the possibility of any indirect effect of the former through the latter). A summary of the indirect effect analyses conducted is presented in Table 4. A total of seven indirect effects were tested, four of which yielded significant results with small effect size. Specifically, emotion suppression mediated the effect of ESS total score and characterological shame on both hostility and psychopathological distress. The other indirect effects (involving self-esteem and overall trait aggression) did not reach statistical significance.

## **Discussion**

The aim of the current study was to confirm and extend previous knowledge on the nomological net surrounding the multidimensional construct of shame, also testing for invariance across gender. Further, the possible mechanisms underlying the association between shame and maladaptive outcomes were investigated, examining the mediating role of maladaptive emotion regulation (i.e., emotional suppression).



**Table 4.** Summary of Bootstrapping Analyses Examining the Indirect Effect of Shame on Self-Esteem, Aggression, and Psychopathological Distress Through the Role of Emotional Suppression, Controlling for Age (Among Females Only;  $N = 251$ ; 5,000 Bootstrap Samples).

Predictor Variable(PV)	Mediating variable(M)	Criterion Variable (CV)	Effect of PV on M (a)	Effect of M on CV, controlling for the PV (b)	Total effect (c)	Direct effect (c)	Indirect effect (bias corrected intervals)		
							(a × b)	95% CI	abcs [95% bias corrected CI]
ESS total	Emotional suppression	Self-esteem	.02**	-.39	-.23***	-.22***	-.007	[-.021, .000]	
ESS total	Emotional suppression	AQ total	.02**	.68	.21**	.20*	.012	[-.015, .053]	
ESS characterological shame	Emotional suppression	AQ total	.04**	.75	.31*	.28	.028	[-.028, .111]	
ESS total score	Emotional suppression	AQ hostility	.02**	.87**	.20	.18***	.016	[.005, .035]	.034 [.009, .075]
ESS characterological shame	Emotional suppression	AQ hostility	.04**	.90**	.32***	.28***	.034	[.012, .075]	.039 [.013, .084]
ESS total score	Emotional suppression	GSI	.02**	.10***	.02	.02***	.002	[.001, .003]	.041 [.012, .081]
ESS characterological shame	Emotional suppression	GSI	.04**	.09***	.04***	.04***	.003	[.001, .007]	.042 [.015, .085]

Note. ESS = Experience of Shame Scale; AQ = Aggression Questionnaire; GSI = Global Severity Index scale of the Symptom Checklist-90-Revised; CI = Confidence Intervals. Unstandardized coefficients are reported.  $abcs$  = completely standardized indirect effect, measure of the effect size for significant indirect effects.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

In line with the expectations, women reported greater levels of shame (specifically: behavioral and bodily shame), and lower levels of self-esteem, than men. Women also reported greater levels of psychopathological distress, cognitive reappraisal, and hostility, whereas men had greater levels of emotional suppression and physical aggression. Taken together, these findings are in line with prior findings (Andrews et al., 2002; Fossati et al., 2003; John & Gross, 2003) on gender differences in emotional experience, emotion regulation styles, as well as in the expression of aggressive tendencies. Notably, levels of characterological and behavioral shame were higher among people who did not have kids, and levels of bodily shame were higher among people who never had a significant romantic relationship. The correlational nature of the study did not allow to speculate about causal effects, but the interesting link between intimate attachment relationships (with children and/or romantic partners) and shame feelings in different domains warrants future investigation.

The nomological network surrounding shame experiences was largely consistent across gender. Behavioral, characterological, and bodily shame feelings were all related with trait shame and trait guilt. Furthermore, shame feelings were associated with decreased self-esteem, and with higher levels of hostility and psychological distress. This is consistent with previous literature (Garofalo, 2015; Elison, 2005; Gilligan, 1996; Marshall et al., 2009) and suggests that the experience of shame does not come in isolation. Rather, feelings of shame are likely associated with a more general lack of confidence in the self as well as in the outside world. As such, it is not surprising that feelings of shame and lack of confidence in the self and the others can be accompanied by overall psychological distress. Some gender differences in the nomological net emerged, suggesting that the experience of shame might have more pronounced consequences in women. Indeed, characterological shame was related with emotional suppression, indicating that women who are more prone to experience feeling of shame about their own personality may tend to adopt maladaptive emotion regulation strategies (Nyström & Mikkelsen, 2013). This might be due to an attempt to protect themselves from the effects of such unbearable feelings (Elison et al., 2014), which would probably increase the experience of shame itself. Therefore, it appears that women who experience characterological shame are likely to suppress, rather than show, their own emotions. In line with this, higher levels of characterological shame were also associated with lower levels of verbal aggression. Further, bodily shame was associated with angry feelings, suggesting that the perception of flaws in their physical aspect could be a trigger for angry and aggressive outbursts especially in females (Hejdenberg & Andrews, 2011). Finally, physical aggression was negatively related to characterological shame in men, indicating a possible inhibiting effect of shame toward aggressive tendencies. This is consistent with the idea that shame feelings are not always bad, and that the experience of shame might have healthy and adaptive consequences (Farmer & Andrews, 2009). For example, feeling ashamed about a previous aggressive behavior can have the positive consequence of inhibiting the same behavior in the future. As a whole, although all others coefficients were nonsignificant, the trends seem to indicate that shame is negatively associated with aggression among men, but positively related (or unrelated) to aggression among women. Future examinations of the possible differential effects of shame on aggression across gender are required to obtain a deeper insight into the shame-aggression link.

Our findings also supported the importance of adopting a multidimensional conceptualization of shame (Andrews et al., 2002). Indeed, over and above the influence of trait shame, characterological and bodily shame were independently associated with low self-esteem and

psychological distress. Further, bodily shame was independently related to hostility. This suggests that, even after controlling for individual differences in the experience of shame in daily life, specific feelings of shame referred to one's identity or body might add to the explanation of internalizing and externalizing symptoms. As a last step, we aimed at exploring possible mechanisms linking shame feelings with maladaptive outcomes. Mediation analyses revealed that—among women—the associations of shame feelings (and, in particular, characterological shame) with hostility and psychological distress was accounted for by emotional suppression. This might indicate that both the externalization (i.e., hostility) and internalization (i.e., psychological distress) of shame feelings could be explained by poor emotion regulation, rather than being an effect of shame *per se*. In other words, shame feelings are likely to increase the individual difficulty in regulating emotions, and this in turn could lead to an increase in hostile attitudes and psychopathological symptoms (Garofalo et al., 2016; Velotti et al., 2014). On the other hand, the same pattern did not explain the association between shame and low self-esteem, suggesting that their shared variance was not accounted for by emotional suppression.

This study presented several limitations. First, the reliance on self-report questionnaires may have inflated correlations due to the spurious effect of common method variance. Second, the generalization of these results is limited by the recruitment of a convenience sample of community individuals, the majority of whom were university students. One possible problem in relying on convenience samples comprising a strong component of university students is a restriction in the variance of several demographic (e.g., Socio Economic Status) and personality (e.g., impulsive or antisocial traits) characteristics that may be linked to some of the variables examined in the present study (e.g., aggression). Third, the correlational design prevents us from drawing conclusions about the causal relations among study variables. Nevertheless, the present findings may help design longitudinal studies to test prospective associations among shame experiences and related constructs over time. Finally, the use of single measures for each construct of interest raises the possibility that results would not generalize to other operationalizations of the same constructs.

Nonetheless, we believe these findings extend current knowledge on the nomological network of shame feelings, providing novel insight on the role of specific shame experiences. Specifically, the present findings suggest that conceptualizing shame as a multidimensional construct may be helpful in delineating the associations between shame and maladaptive outcomes. Notably, our study also provides additional support for the use of the ESS as a brief multidimensional measure of shame experiences. From a clinical point of view, this is important as a focus on specific 'faces' of shame can be appropriate to target psychopathological symptoms and aggression. Finally, the current study advanced prior knowledge indicating that fostering the use of adaptive emotion regulation strategies could be an important target to prevent or reduce psychopathological symptoms and aggression.

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## References

- Andrews, B., Qian, M., & Valentine, J. D. (2002). Predicting depressive symptoms with a new measure of shame: The experience of shame scale. *British Journal of Clinical Psychology, 41*, 29–42.
- Balzarotti, S., John, O. P., & Gross, J. J. (2010). An Italian adaptation of the Emotion Regulation Questionnaire. *European Journal of Psychological Assessment, 26*, 61–67.
- Buss, A. H., & Perry, M. (1992). The aggression questionnaire. *Journal of Personality and Social Psychology, 63*, 452–459. doi: 10.1037/0022-3514.63.3.452
- Caretti, V., Craparo, G., & Schimmenti, A. (2010). Il ruolo della disregolazione affettiva, della dissociazione e della vergogna nei disturbi del comportamento alimentare. [The role of affective dysregulation, dissociation and shame in eating disorders]. In V. Caretti, & D. La Barbera (eds.), *Addiction. Aspetti Biologici e di Ricerca [Addiction. Biological and Research Aspects]* (pp. 135–165). Milano, IT: Raffaello Cortina Editore.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/ correlation analysis for the behavioral sciences (3<sup>rd</sup> ed.)*. Hillsdale, NJ: Erlbaum.
- Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin, 52*(4), 281–302.
- Derogatis, L. R. (1994). *SCL-90-R, administration, scoring and procedures manual for the revised version (3<sup>rd</sup> ed.)*. Minneapolis, MN: National Computer Systems.
- Elison, J. (2005). Shame and guilt: A hundred years of apples and oranges. *New Ideas in Psychology, 23*, 5–32.
- Elison, J., Garofalo, C., & Velotti, P. (2014). Shame and aggression: Theoretical considerations. *Aggression and Violent Behavior, 19*, 447–453.
- Elison, J., Pulos, S., & Lennon, R. (2006). Shame-focused coping: An empirical study of the compass of shame. *Social Behavior and Personality, 34*, 161–168.
- Farmer, E., & Andrews, B. (2009). Shameless yet angry: shame and its relationship to anger in male young offenders and undergraduate controls. *Journal of Forensic Psychiatry & Psychology, 20*, 48–65.
- Fossati, A., Maffei, C., Acquarini, E., & Di Ceglie, A. (2003). Multigroup confirmatory component and factor analyses of the Italian version of the aggression questionnaire. *European Journal of Psychological Assessment, 19*, 54–65.
- Garofalo, C. (2015). Emozionalità negativa ed autostima in un campione di offender detenuti: Uno studio preliminare [Negative emotionality and self-esteem in an incarcerated offender sample: Preliminary investigation]. *Giornale Italiano di Psicologia [Italian Journal of Psychology], 42*, 363–371.

- Garofalo, C., Holden, C. J., Zeigler-Hill, V., & Velotti, P. (2016). Understanding the connection between self-esteem and aggression: The mediating role of emotion dysregulation. *Aggressive Behavior, 42*, 3–15.
- Gilligan, J. (1996). *Violence. Reflections on a National Epidemic*. New York, NY: Vintage Books.
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology, 85*, 348–362.
- Gross, J. J., & Levenson, R. W. (1993). Emotional suppression: Physiology, self-report, and expressive behavior. *Journal of Personality and Social Psychology, 64*, 970–986.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Press.
- Hejdenberg, J., & Andrews, B. (2011). The relationship between shame and different types of anger: A theory-based investigation. *Personality and Individual Differences, 50*, 1278–1282.
- Izard, C. E., Libero, D. Z., Putnam, P., Haynes, O. M. (1993). Stability of emotion experiences and their relations to traits of personality. *Journal of Personality and Social Psychology, 64*(5), 847–860.
- Lanteigne, D. M., Flynn, J. J., Eastabrook, J. M., & Hollenstein, T. (2014). Discordant patterns among emotional experience, Arousal, and expression in adolescence: Relations with emotion regulation and internalizing problems. *Canadian Journal of Behavioural Science / Revue canadienne des sciences du comportement, 46*, 29–39.
- Marshall, W. L., Marshall, L. E., Serran, G. A., & O'Brien, M. D. (2009). Self-esteem, shame, cognitive distortions and empathy in sexual offenders: Their integration and treatment implications. *Psychology, Crime & Law, 15*, 217–234.
- Nyström, M. B. T., & Mikkelsen, F. (2013). Psychopathy-related personality traits and shame management strategies in adolescents. *Journal of Interpersonal Violence, 28*, 519–537.
- Prezza, M., Trombaccia, F. R., & Armento, L. (1997). La scala dell'autostima di Rosenberg: Traduzione e validazione Italiana. [The Rosenberg self-esteem Scale: Italian translation and validation.]. *Bollettino di Psicologia Applicata [Applied Psychology Bulletin], 223*, 35–44.
- Prunas, A., Sarno, I., Preti, E., Madeddu, F., & Perugini, M. (2012). Psychometric properties of the Italian version of the SCL-90-R: A study on a large community sample. *European Psychiatry, 27*, 591–597.
- Roberton, T., Daffern, M., & Bucks, R. S. (2012). Emotion regulation and aggression. *Aggression and Violent Behavior, 17*, 72–82.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Tangney, J. P., & Dearing, R. L. (2002). *Shame and guilt*. New York, NY: Guilford Press.
- Velotti, P., Elison, J., & Garofalo, C. (2014). Shame and aggression: Different trajectories and implications. *Aggression and Violent Behavior, 19*, 454–461.
- Zavattini, G. C., Garofalo, C., Velotti, P., Tommasi, M., Romanelli, R., Espirito Santo, H., & Saggino, A. (2015). Dissociative experiences and psychopathology among inmates in Italian and Portuguese prisons. *International Journal of Offender Therapy and Comparative Criminology*. Advance online publication. doi.org/10.1177/0306624X15617256.