

Shame on You, Shame on Me: Shame as an Evolutionary Adaptation

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Figure 1. A Belgian Iron “scolds bridle” or “branks” mask, with bell, used to publicly humiliate and punish, mainly women, for speaking out against authority, nagging, brawling with neighbors, blaspheming, or lying.

Can shame be good for you? We often think of shame as a shackling emotion that thwarts our individuality and creativity. A sense of shame could prevent us from choosing a partner we truly love, speaking out against societal traditions that propagate injustice, or pursuing a profession that is deemed unworthy by our peers. But if shame is so detrimental, why did we evolve with this emotion? A team of researchers led by Daniel Sznycer from the Center for Evolutionary Psychology at the University of California, Santa Barbara, [recently published a study in the *Proceedings of the National Academy of Sciences*](#) (1) that suggests that shame is an important evolutionary adaptation. According to their research, which was conducted in the United States, Israel, and India, the sense of shame helps humans avoid engaging in acts that could lead to them being devalued and ostracized by their community.

For their first experiment, the researchers enrolled participants in the U.S. (118 participants completed the study; mean age of 36; 53% were female) and India (155 participants completed the study; mean age of 31; 38% were female) using the online [Amazon Mechanical Turk crowdsourcing platform](#) (2) as well as 165 participants from a university in Israel (mean age of 23; 81% female). The participants were randomly assigned to two groups and presented with 29 scenarios: The “*shame group*” participants were asked to rate how much shame they would experience if they lived through any given scenario, whereas the “*audience group*” participants were asked how negatively they would rate a third-party person of the same age and gender as the participants in an analogous scenario.

Here is a specific scenario to illustrate the study design:

Male participants in the “shame group” were asked to rate “*at the wedding of an acquaintance, you are discovered cheating on your wife with a food server*” on a scale ranging from 1 (*no shame at all*) to 7 (*a lot of shame*).

Female participants in the “shame group” were asked to rate “*at the wedding of an acquaintance, you are discovered cheating on your husband with a food server*” on a scale ranging from 1 (*no shame at all*) to 7 (*a lot of shame*).

Male participants in the “audience group,” on the other hand, were asked to rate “*at the wedding of an acquaintance, he is discovered cheating on his wife with a food server*” on a scale ranging from 1 (*I wouldn’t view him negatively at all*) to 7 (*I’d view him very negatively*).

Female participants in the “audience group” rated “*at the wedding of an acquaintance, she is discovered cheating on her husband with a food server*” on a scale ranging from 1 (*I wouldn’t view her negatively at all*) to 7 (*I’d view her very negatively*).

To give you a sense of the breadth of scenarios that the researchers used, here are some more examples:

You stole goods from a shop owned by your neighbor.

You cannot support your children economically.

You get into a fight in front of everybody, and your opponent completely dominates you with punch after punch until you’re knocked out.

You receive welfare money from the government because you cannot financially support your family.

You are not generous with others.

For each of the 29 scenarios, the researchers created gender-specific “shame” and “audience” versions. The “audience group” reveals how we rate the bad behavior of others (devaluation) whereas the “shame group” provides information on how much shame we feel if we engage in that same behavior. By ensuring that participants only participated in one of the two groups, the researchers were able to get two independent scores – shame versus devaluation – for each scenario.

The key finding of this experiment was that the third-party devaluation scores were highly correlated with the shame scores in all three countries. For example, here are the mean “shame scores” for the wedding infidelity scenario indicating that people in all three countries would have experienced a lot of shame:

U.S.: 6.5

India: 5.7

Israel: 6.7

The devaluation scores from the third-party “audience group” suggested that people viewed the behavior very negatively:

U.S.: 6.4

India: 5.1

Israel: 6.6

For nearly all the scenarios, the researchers found a surprisingly strong correlation between devaluation and shame, and they also found that the correlation was similarly strong in each of the surveyed countries.

The researchers then asked the question whether this correlation between personal shame and third-party negative valuation was unique to the shame emotion or whether other negative emotions, such as anxiety or sadness, would also correlate equally well with devaluation. This experiment was only conducted with the participants in the U.S. and India. The researchers found that even though the fictitious scenarios elicited some degree of anxiety and sadness in the participants, the levels of anxiety or sadness were not significantly correlated with the extent of devaluation. The researchers interpreted these results as suggesting that there is something special about shame because it tracks so closely with how bad behavior is perceived by others whereas sadness or anxiety do not.

How do these findings inform our view on the evolutionary role of shame? The researchers suggest that instead of designating shame as an “ugly” emotion, it is instead an excellent predictor of how our peers would view our behaviors and thus deter us from making bad choices that could undermine our relationships with members of our community. The strong statistical correlations between shame and negative valuation of the behaviors as well as the universality of this link in the three countries indeed support the conclusions of the researchers. However, there are also so important limitations of these studies. As with many evolutionary psychology studies, it is not easy to ascribe a direct cause-effect relationship based on a correlation. Does devaluation lead to evolving a shame mechanism, or is it perhaps the other way around? Does a sense of shame lead to a societal devaluation of certain behaviors, such as dishonesty? It is also possible that the participants in the audience group responded with the concept of “shame” in the back of their minds even though they were not asked to directly comment on how shameful the act was. Perhaps their third-party assessments of how bad the behavior was were clouded by their own perceptions of how shameful the behavior would be if they themselves had engaged in it.

Another limitation of the study is that the participants represented a young subgroup of society. The mean ages of 23 (Israel), 31 (India), and 36 (U.S.), as well as the use of an online Amazon Mechanical Turk questionnaire, means that the study results predominantly reflect the views of Millennials. The similarities of the shame and devaluation scores in three distinct cultures are among the most remarkable findings of these studies. However, perhaps they are more reflective of a global convergence of values among the Millennial generation than an underlying evolutionary conservation of an adaptive mechanism.

These limitations should not detract from the provocative questions raised by the studies. They force us to rethink how we view shame. Like all adaptive defense mechanisms, shame could go awry. Our immune function, for example, is an essential defense mechanism, but an [unfettered immune response can destroy the very body it is trying to protect](#). (3) Perhaps shame acts in a similar fashion. A certain level of shame could help us function in society by promoting certain moral values such as justice, honesty, or generosity. But, an excess of shame may become a maladaptive prison that compromises our individuality.

Acknowledgments:

Image Credit: Belgian Iron “branks” mask (1550-1800) by [Wellcome Images](#).

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