## UC SANTA BARBARA



September 10, 2018 Andrea Estrada

# The Universality of Shame

Shame on you. These three simple words can have devastating effect on an individual's psyche.

But why is that? How is the feeling of shame generated, and what is its purpose? Some theorists argue that feeling shame is a pathology, a condition to be cured. Others dismiss it as a useless, ugly emotion.

A research team at the University of Montreal and UC Santa Barbara's Center for Evolutionary Psychology (CEP), however, suggest something altogether different. Shame, they argue, was built into human nature by evolution because it served an important function for our foraging ancestors.

Living in small, highly interdependent bands, the researchers explain, our ancestors faced frequent life-threatening reversals, and they counted on their fellow band members to value them enough during bad times to pull them through. So being devalued by others — deemed unworthy of help — was literally a threat to their survival. Therefore, when considering how to act, it was critical to weigh the direct payoff of a potential action (e.g., how much will I benefit by stealing this food?) and against its social costs (e.g., how much will others devalue me if I steal the food — and how likely is it that they will find out?).

The researchers hypothesized that the intensity of anticipated shame people feel is an internally generated prediction of just how much others will devalue them if they take a given action. Moreover, if this feature was part of human nature, it should be observed everywhere — in every culture.

To test for universality, they selected a linguistically, ethnically, economically and ecologically diverse set of cultures scattered around the world. In these 15 traditional, small-scale societies, the researchers found that the intensity of shame people feel when they imagine various actions (stealing, stinginess, laziness, etc.) accurately predicts the degree to which those actions would lead others in their social world to devalue them. Their findings appear in the <a href="Proceedings of the National Academy of Sciences">Proceedings of the National Academy of Sciences</a>.

#### The Function of Feelings

"In a world without soup kitchens, police, hospitals or insurance, our ancestors needed to consider how much future help they would lose if they took various actions that others disapprove of but that would be rewarding in other ways," said lead author Daniel Sznycer, an assistant professor of psychology at the University of Montreal. "The feeling of shame is an internal signal that pulls us away from acts that would jeopardize how much other people value our welfare."

Noted Leda Cosmides, a professor of psychology at UC Santa Barbara, co-director of the CEP and a co-author of the paper, "For this to work well, people can't just stumble about, discovering after the fact what brings devaluation. That's too late. In making choices among alternative actions, our motivational system needs to implicitly estimate in advance the amount of disapproval each alternative action would trigger in the minds of others."

A person who did only what others wanted would be selected against, the authors point out, because they would be completely open to exploitation. On the other hand, a purely selfish individual would be shunned rapidly as unfit to live with in this highly interdependent world — another dead end.

"This leads to a precise quantitative prediction," said John Tooby, a professor of anthropology at UC Santa Barbara, CEP co-director and a coauthor of the paper. "Lots of research has shown that humans can anticipate personal rewards and costs accurately, like lost time or food. Here we predicted that the specific intensity of the shame a person would anticipate feeling for taking an action would track how much others in their local world would negatively evaluate the person if they took that specific act.

"The theory we're evaluating," he continued, "is that the intensity of shame you feel when you consider whether to take a potential action is not just a feeling and a motivator; it also carries vital information that seduces you into making choices that balance not only the personal costs and benefits of an action but also its social costs and benefits. Shame takes the hypothetical future disapproval of others, and fashions it into a precisely calibrated personal torment that looms the closer the act gets to commission or discovery."

#### **A Universal Human Quality**

According to the authors, shame — like pain — evolved as a defense. "The function of pain is to prevent us from damaging our own tissue," said Sznycer. "The function of shame is to prevent us from damaging our social relationships, or to motivate us to repair them if we do."

As a neural system, shame inclines you to factor in others' regard alongside private benefits so the act associated with the highest total payoff is selected, the authors argue. A key part of the argument is that this neurally based motivational system is a part of our species' biology. "If that is true, we should be able to find this same shame-devaluation relationship in diverse cultures and ecologies all around the world, including in face-to-face societies whose small scale echoes the more intimate social worlds in which we think shame evolved," Sznycer noted.

To test this hypothesis, the team collected data from 15 traditional small-scale societies in four continents. The people in these societies speak very different languages (e.g., Shuar, Amazigh, Icé-tód), have diverse religions (e.g., Hinduism, Shamanism), and make a living in different ways (e.g., hunting, fishing, nomadic pastoralism). If shame is part of universal, evolved human nature, the research should find that the emotion closely tracks the devaluation of others, for each specific act, in each community; but if shame is more akin to a cultural invention like agriculture or the alphabet, present in some places but not others, they should find wide variation from place to place in this relationship. Indeed, anthropologists have long proposed that some cultures are guilt-oriented, some are fear-oriented, and some are shame-honor.

Yet, the authors found the predicted relationships everywhere they tested. "We observed an extraordinarily close match between the community's negative evaluation of people who display each of the acts or traits they were asked about

and the intensities of shame individuals anticipate feeling if they took those acts or displayed those traits," Sznycer said. "Feelings of shame really move in lockstep with the values held by those around you, as the theory predicts."

Further studies, he added, have demonstrated that it is specifically shame — as opposed to other negative emotions — that tracks others' devaluation. "Moral wrongdoing is not necessary," said Sznycer. "In other research we showed that individuals feel shame when others view their actions negatively, even when they know they did nothing wrong."

Of interesting note, anticipated shame mirrored not only the disapproval of fellow community members, but also the disapproval of (foreign) participants in each of the other societies. For example, the shame expressed by the Ik forager-horticulturalists of Ikland, Uganda, mirrored not only the devaluation expressed by their fellow Iks, but also the devaluation of fishermen from the Island of Mauritius, pastoralists from Khövsgöl, Mongolia, and Shuar forager-horticulturalists of the Ecuadorian Amazon. What's more, shame mirrored the devaluation of foreigners living nearby in geographic or cultural space just as well as it mirrored the devaluation of foreigners living farther and farther away — another indication of shame's universality.

These findings suggest that shame is a biological capacity that is part of human nature (such as the ability to speak a language), and not a cultural invention present only in some populations (such as the ability to read or write).

"Shame's reputation isn't pretty," Sznycer concluded, "but a closer look indicates that this emotion is elegantly engineered to deter harmful choices and make the best of a bad situation."

Other co-authors of the paper include Elizabeth Agey and Sarah Alami of UCSB, Dimitris Xygalatas of the University of Connecticut, Xiao-Fen An and Jin-Ying Zhuang of East China Normal University, Kristina Ananyeva and Alexander Kharitonov of the Russian Academy of Sciences, Quentin Atkinson of the University of Auckland and Max Planck Institute for the Science of Human History, Athena Aktipis of Arizona State University, Bernardo Broitman and Carola Flores of the Centro de Estudios Avanzados en Zonas Áridas, Thomas Conte, Cathryn Townsend, and Lee Cronk of Rutgers University, Shintaro Fukushima of Aoyama Gakuin University, Hidefumi Hitokoto of Fukuoka University, Charity Onyishi and Ike Onyishi of the University of Nigeria, Pedro Romero of the Universidad San Francisco de Quito, Joshua Schrock, Josh Snodgrass, and Lawrence Sugiyama of the University of Oregon, and Kosuke

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