Life & Times

Viewpoint



"Perhaps the notion with the greatest currency is that crying is a gesture of surrender. Tears could be a form of social signalling: a white flag to caregivers or the community of helplessness and vulnerability."

REFERENCES

- 1. Darwin C. The expression of emotions in man and animals. London: Julian Friedman Publishers 1872
- 2. Nelson JK. The meaning of crying based on attachment theory. Clinical Social Work Journal 1998; **26:** 9-22.
- 3. Vingerhoets A. Why study crying? http://www. advingerhoets.com/research (accessed 27 Feb 2020).
- Reed LI, Matari Y, Wu M, Janaswamy R. Emotional tears: an honest signal of trustworthiness increasing prosocial behavior?. Evol Psychol 2019; 17(3): 1474704919872421

Why do we cry? Are tears 'purposeless'?

There is no doubting that Charles Darwin is celebrated as one of the greatest British scientists. His views on evolution rewired world thinking; in his time, his ideas were nothing short of revolutionary. But when it came to the human propensity to sob, Darwin dubbed emotional tears as 'purposeless'.1 Was Darwin right?

Many doctors confess to crying at work whether openly in front of patients or behind the scenes; whether it is from compassion for an ill patient or from the overwhelming nature of endless responsibility. Yet more doctors have probably sobbed but not admitted to it, perhaps perceiving it as improper or a weakness. Like it or not, crying is part of our emotional toolkit. In recent decades, many scientists have offered ideas on this evolutionary oddity; however, the reason for this fundamentally human trait remains a mystery.

Crying is defined as the shedding of tears in response to an emotional state. This is different from lacrimation, which is the nonemotional shedding of tears. It may surprise you to know that there are actually three types of tears: basal tears that lubricate the cornea; reflex tears that rinse away foreign particles; and psychic tears, the sobbing, weeping, wailing tears that are produced in response to a strong emotion. But why has evolution allowed this seemingly pointless peculiarity to persist?

Many scientists have thrown their investigative hats into the ring and a variety of ideas have emerged. Perhaps the notion with the greatest currency is that crying is a gesture of surrender. Tears could be a form of social signalling: a white flag to caregivers or the community of helplessness and vulnerability. This is most apparent in infancy, when it is the only means of communication between parent and child. Indeed, the eminent psychiatrist John Bowlby long ago highlighted the role of crying in engendering attachment between mother and child.2

Crying is a trait shared by other animals too; however, it is only in humans that emotional tears are seen. Furthermore, it is only in humans that the capacity to cry persists into adulthood. In many respects, this makes no evolutionary sense. Sobbing would surely alert your presence to a predator. Here, Dutch professor of clinical psychology Ad Vingerhoets proposes an elegant theory. Given, in some prehistoric circumstances, that crying could be risky, Vingerhoets explains that crying could be less risky than shouting loudly. It would also portray the preyed upon as being harmless or submissive.3

Crying is an emotional signal of pacification and appeasement. This may well have helped early human settlements to thrive in trusting cohesive communities. He argues that sobbing is a tool enabling social connectedness. Tears may have been a key player in humanity's prosocial and moral development; we care for the sick and the disabled. The ability to empathise is central. Indeed, recent research has shown that crying individuals are more likely to be perceived as being honest and reliable compared with non-crying individuals.4

It is easy to understand why infants cry. They are defenceless to the world around them. Growth into adulthood mostly sees to the vulnerabilities of infancy. But there are still times of helplessness in life. Tears are still a detectable indication that support is needed. This theory is backed by an interesting observation: emotional tears contain a higher protein content. Being more viscous, they stick to the skin, taking longer to roll down the face. Unlike the glow in your heart when you're in love, or the fire in your belly when you're angry, tears are a visible clue to someone's feelings.

The jury is out on the truth that crying is cathartic. Certainly, some feel sobbing is a psychological tonic. Other researchers believe the result actually comes from the comforting reactions of others rather than the act of crying per se.2

Ultimately, the experience of crying varies from person to person. Everything from our gender and culture to our temperament may have a bearing. Tears can accompany weddings, funerals, and our own private pain. They are a symptom of a rich spectrum of

Perhaps there are some elements of the human spirit that are inaccessible to measurement and will remain baffling to science? Was Darwin correct in labelling tears 'purposeless'?

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