In response to: **The human fear paradox: Affective origins of cooperative care**
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Abstract

The target article posits that caregiver cooperation rendered heightened expression of childhood fear an adaptive response to threat. I argue that caregiver cooperation rendered childhood fear expression less accurate as a signal of actual threat, and hence less effective for harm avoidance. Further, other emotional expressions that avoid unwarranted caregiver stress may be more likely to evoke needed care.

Article contents

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At its core, the fearful ape hypothesis posits that vulnerable humans under perceived threat started signaling for help (expressed fear) in environments where help was likely to be given (alloparental care). The notion of emotions as a social influence tactic is well accepted (Crivelli & Fridlund, 2018), and the author argues that fear signaling as a threat response is more adaptive in cooperative care environments, where help is more abundant. Neglected, however, is the parallel notion that in environments where help is more abundant, fearfulness may be less indicative of actual threat. In cooperative care environments, expressions of fear may be more noticed and attended to, *but less accurate*. Why? In environments with more abundant

cooperative care, most threats are anticipated and addressed, rendering persistent childhood fear unnecessary. For instance, the dark is very unlikely to present any danger when one sleeps in a caregiver-protected dwelling, in the vicinity of a large extended family, under the protection of the entire community. The real threats that remain require enculturation to comprehend.

It follows that under cooperative care, the expression of heightened childhood fear is an unlikely adaptive solution to staving off immediate danger as it is a poor indicator of actual threat.

Consider an environment replete with ultrasociality, wherein adults at the apex of their intellectual and physical capacities form groups within which they cooperate to feed, protect, and educate their children. Let's assume that in such groups, individuals value common knowledge (Lewis, 1969; Shteynberg, Hirsh, Bentley, & Garthoff, 2020) – that is, they prioritize information known to be known. In such groups, historic, present, and would-be threats under shared attention (Shteynberg, 2010, 2015) are emphasized, collective attitudes toward those threats (Hardin & Higgins, 1996; Pinel, Long, Landau, Alexander, & Pyszczynski, 2006) are felt deeply, shared intentions (Tomasello, 1995) and a division of labor (Wegner, 1987) govern threat prevention and threat response. These collective notions of environmental threats, appropriate safeguards, and contingent responses are codified into a cognitive representation of the group itself – a part and parcel of a collective identity schema (Brewer & Gardner, 1996). In short, group members define themselves, in part, by the means they undertake to protect the group. In addition, “in situ” responses can be formulated “on-the-fly” based on in-the-moment sharedness of objective, affective, motivational states, wherein individuals represent themselves as non-specific collective agents – experienced as a knowing, feeling, and pursuing “we” in the moment (Shteynberg, Hirsh, Garthoff, & Bentley, 2022). That is, group members can engage in an improvised, yet organized, collaborative defense of the group.

One task of a child born into such a social soup is to learn its ways, a protracted process that culminates in adolescence. Heightened childhood fear is unlikely to be indicative of actual threat as it precedes rather than follows enculturation. It is

therefore an open question of whether heightened childhood fear can help caregivers protect the child from danger; it may even distract caregivers from noticing such danger.

After all, when caregivers are more responsive, children are less fearful, not more (Ainsworth, 1979). These securely attached children rely more on their caregivers to keep them safe than their personal capacity to detect threats. In societies with greater wealth and thus lower childhood mortality, childhood fear expression is even less indicative of actual threat because there is less threat. Childhood fear in such societies may not be less accommodated, but less warranted.

Perhaps heightened childhood fear is adaptive – but not because it helps human adults respond to a child in real danger, but rather, as the target article also suggests, because it increases affective bonding and caregiver investment (Hrdy, 2016; Tomasello, 2020). How would a heightened expression of fear help such a child?

Perhaps by evoking empathy. When it comes to the provision of altruistic care to progeny, a significant amount of scholarship suggests that empathic concern, worry about the welfare of another, is an essential ingredient (Batson, 2009, 2011). Let us assume that the expression of fear is particularly powerful is soliciting feelings of empathic concern from would-be caregivers, yielding greater affective bonding, and caregiver investment in the child. However, this sword is double-edged. To the extent that the child's expressions of fear are not well calibrated to actual threats in the environment, a-child-who-cried-wolf dilemma emerges: Heightened, but “baseless,” expressions of fear are likely to tax the emotional, cognitive, and behavioral resources of caregivers – especially in ultrasocial contexts where the few threats that do remain are already under cooperative surveillance and care.

Humans may express more fear than apes. The adaptive, or otherwise, reasons for heightened fear expressiveness are worth exploring. The target article raises one definite possibility: cooperative care. However, under cooperative care, children's fear as a signal of threat is both more noticed, and less accurate. This implies that as an

affective bonding strategy, emotional expressions that avoid unwarranted caregiver stress may be more adaptive.

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Competing interest

None.

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