



Staying alive includes adaptations for catalyzing cooperation

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Abstract

The target article interprets women's lower competitiveness than men's as evidence of adaptation to help women avoid physical conflicts and stay alive. This commentary advances the additional hypothesis that strategically suppressing competitiveness, thus signaling egalitarian intentions, could be an adaptation to catalyze cooperative behavior from males and females, turning natural competitors (other women) into allies and men into supportive partners.

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Benenson, Webb, and Wrangham's (2022) article interprets women's lower competitiveness compared to men's as evidence of an adaptation that would permit females to avoid physical conflicts, thereby helping them with staying alive (Campbell, 1999). Among other strategies – such as smiling, politeness, and emotion identification – avoidance of confrontations is posited as having the potential to reduce hostile interactions. Specifically, the argument focuses on the results of competitiveness experiments in which women are systematically determined less likely than men to compete against others (Klege, Visser, Barron, & Clarke, 2021; Niederle & Vesterlund, 2011; Sutter, Zoller, & Glätzle-Rutzler, 2019). It concludes that such behavior should reduce interpersonal conflicts and decrease social tensions. Recent economic evidence suggests that we could take Benenson, Webb, and Wrangham's hypothesis one step further, and venture that women not only avoid direct competition to reduce interpersonal conflicts, but also to actively pursue strategies that increase the opportunities to cooperate with others, both males (as mates or potential romantic partners) and other females (as allomaternal helpers). Such proactive prosocial strategy should be included as another behavioral pillar of staying alive theory. Some evidence in support of this hypothesis is as follows.

First, the competitiveness elicited by economics games is reminiscent of labor markets, where confrontations rarely escalate to the level of physical attacks. Individuals competing for CEO positions do not usually resort to eliminating contenders. Gaining prestige, rather than physical violence, may be a more frequent way to climb rank in the economic sphere (Cheng, Tracy, Foulsham, Kingstone, & Henrich, 2013). This suggests an alternative hypothesis for why women shy away from competitive environments: Such systematic preference could actually derive from an evolved avoidance of situations with unequal distributions of resources. Inasmuch as it produces non-egalitarian outcomes, competitions may put further cooperation between winners and losers at risk (Bartling, Fehr, Maréchal, & Schunk, 2009). Data from a wide variety of experiments indicate that women are not necessarily always more generous than men (Croson & Gneezy, 2009; Eckel & Grossman, 1998), but they do systematically prefer equal distributions of resources and power more strongly than men (Andreoni & Vesterlund, 2001; Dufwenberg & Muren, 2006; Fehr, Glätzle-Rützler, & Sutter, 2013; Selten & Ockenfels, 1998). Inequalities of resource, power, and status may erode cooperation based on reciprocity and mutual altruism, while egalitarianism could be a critical factor for the evolution of strong reciprocity and cooperation (Andreoni, Harbaugh, & Vesterlund, 2003; Boehm, 1999; Bowles, 2006; Dawes, Fowler, Johnson, McElreath, & Smirnov, 2007; Fehr, Fischbacher, & Gächter, 2002; Hooper, Kaplan, & Jaeggi, 2021). Cooperation based on reciprocity may have been especially relevant for women who, for large part of human history, had to leave their family, reside with their husbands' kin, and rely on non-kin and strangers for help (Kaplan, Hill, Lancaster, & Hurtado, 2000; Seielstad, Minch, & Cavalli-Sforza, 1998). So, rather than competitiveness per se, women may be particularly susceptible to non-egalitarian distributions of resources. If egalitarianism is a catalyst for sustained cooperation, as both theory and experimental evidence suggest, and cooperation based on reciprocity is more attuned to women than to men, women may actively try to protect its potential by avoiding environments that create inequalities.

Second, the lower female competitiveness reported in economic experiments is mainly observed when women compete against men or in mixed groups (e.g., Geraldes, 2020). Importantly, recent research shows emerging evidence of the costs borne by women who compete and succeed in the economic and political arenas, penalties felt both on the household front and with same-sex individuals. Women who obtain high status in society by reaching high-executive and political positions appear not to gain commensurate advantages in attracting higher quality men (Fisher, 2013; Fisman, Iyengar, Kamenica, & Simonson, 2006), are more likely to get divorced than men (Folke & Rickne, 2016), are subject to adverse reactions from their partners, and report lower marital satisfaction (Bertrand, Kamenica, & Pan, 2015). Furthermore, for women, having more status, power and resources may alienate the support from other women (Benenson, 2013; Benenson & Markovitz, 2014). Yet, the benefits to securing the continued support of resource-holding mates and the assistance of other women are far-reaching for the women's own outcomes and their offspring's (Geary, 2000; Hrdy, 2009; Rucas, 2017). Hence, strategically downplaying one's competitiveness may be a fundamental strategy – likely unconscious or the result of self-deception (Von Hippel & Trivers, 2011) – for attracting and maintaining mates, securing same-sex allies, and sustaining their cooperation.

Third, lower female competitiveness is not a universal find (for a review of this literature, see Cassar & Rigdon, 2021a). Even in cultures and samples in which a competitiveness sex gap exists, it responds to incentives and a change in the game rewards can greatly reduce it. Namely, in a first series of experiments across different cultures, substituting cash rewards with prizes that benefit the children of the participants eliminates the difference in competitiveness between mothers and fathers (Cassar, Wordofa, & Zhang, 2016; Cassar & Zhang, 2021). In a second series of experiments, adding a prosocial option (where the winners can send some of their rewards to the losers) increases women's competitiveness to the men's levels (Cassar & Rigdon, 2021a, 2021b). These findings suggest that it is not competitiveness per se that women lack, but, rather, that women more than men are particularly interested and responsive to the social aspects of competitions.

In conclusion, this body of evidence suggests that women may strategically downplay their competitiveness not just to reduce potentially dangerous interpersonal conflicts but, primarily, to actively elicit cooperative behavior from both males and females. In intra-sex competitions, by signaling egalitarian intentions, women may turn natural competitors into supportive allies based on reciprocity. In inter-sex competitions, the suppression of competitiveness when facing a male (whose higher competitiveness, on the contrary, may signal good male mate value) would be an adaptation for catalyzing women–male cooperation for “the formation of alliances to raise children.” Staying alive requires the strategic reduction of competitiveness as an adaptation for eliciting cooperation for the benefit of offspring.

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Conflict of interest

None.

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