Biological Sensitivity to Context and Life History Theory:
How the same trait leads to different behavior.

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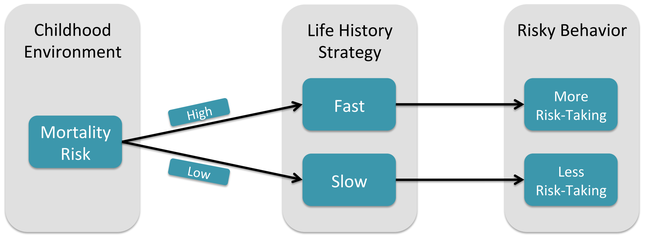
Background

LIFE HISTORY THEORY (LHT):

- Mortality threats early in life entrain distinct behavioral profiles that maximize fitness trade-offs (Ellis et al.,2009).
- These behavioral profiles range from faster, more risk-prone strategies to slower, more risk-averse strategies.
- Therefore, adult risk-taking behavior is contingent on childhood experiences (Griskevicius, 2011; 2013).
- High or low mortality risk in childhood causes people to diverge in their risky behavior:



Research Question 1:

Do high and low levels of childhood mortality risk affect everyone in the same way?

BIOLOGICAL SENSITIVITY TO CONTEXT:

- There exists meaningful individual differences in the sensitivity of the Stress Response System (SRS).
- Some people are like Orchids while others are like Dandelions:

Orchids are sensitive | Dandelions are insensitive

- Both positive (nourishing) and negative (harsh) environments have been a part of human evolutionary history.
- The SRS encodes this information and adaptively adjusts development to meet the likely demands of adulthood.
- A more sensitive SRS (Orchid) leads to greater *positive and negative* environmental influence in childhood.

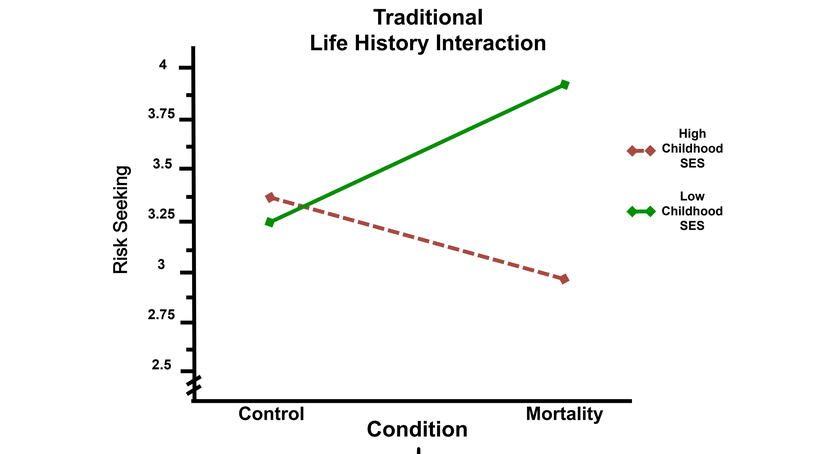
Research Question 2:

How does Biological Sensitivity to Context influence the expression of Life History strategies?

Methods

- Participants either read a fake news article about local mortality threats or a control story.
- Then they answered financial preference questions measuring risk-taking behavior.
- Childhood environment was indexed using socioeconomic status (SES).
- Biological Sensitivity was measured using the Highly Sensitive Person scale (Aron & Aron, 1997).

Results



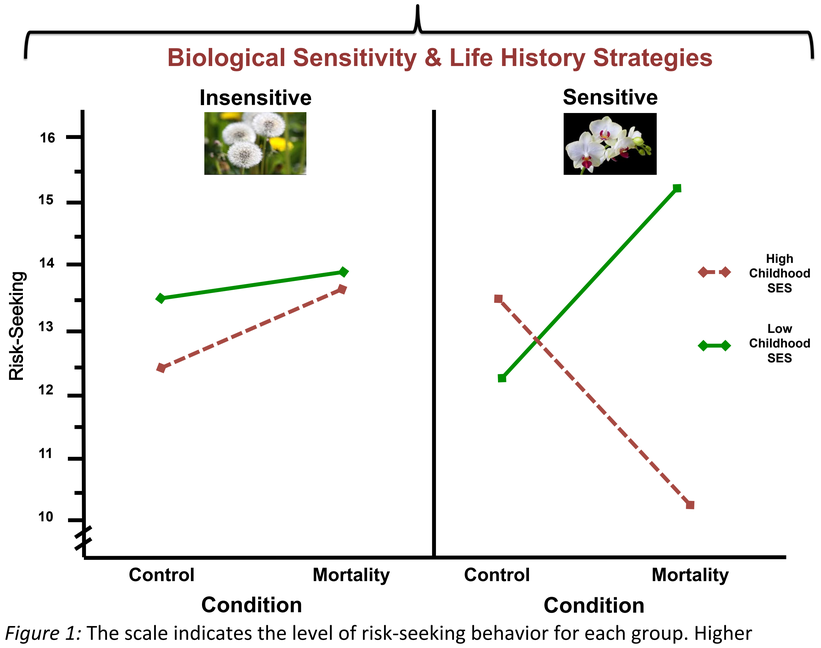
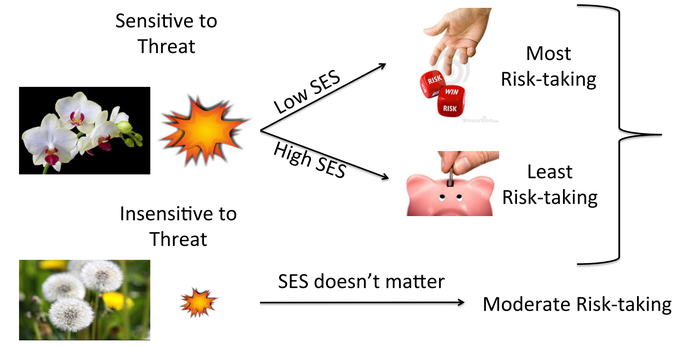


Figure 1: The scale indicates the level of risk-seeking behavior for each group. Higher numbers mean more risk-seeking behavior.

Conclusions

- Biological Sensitivity to Context influences HOW MUCH childhood environments shape development.
- Orchids are sensitive to positive (high SES) *and* negative (low SES) childhood environments.
- These findings suggest that Orchids drive the expression of LH strategies under a current morality threat.



- Future research will need to identify exact physiological correlates of Biological Sensitivity that influence the expression of LH strategies.

References & Contact Info

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