

## Review of: "Variability in Psychological Security Among Individuals and Groups: An Evolutionary and Developmental Perspective"

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The manuscript provided a comprehensive review of the theoretical views and relevant empirical evidence regarding the intricate relationships among evolutionary processes, culture, and familial processes, as well as individual differences in social interactions, behaviors, physiological and neuropsychological patterns that generate variability in psychological security at both individual and group levels. It also provided strategies and advice for enhancing psychological security for the purpose of "fostering adaptive, inclusive, and secure organizational ecosystems in alignment with our evolutionary past".

This manuscript is well-written and provides a highly structured summary of relevant theories.

While I do appreciate such highly informative summaries, there seems to be a lack of an overarching idea to organize these existing theoretical opinions. What overarching structure can potentially unify the theoretical perspectives from diverse fields, eventually contributing to a deeper understanding of what is called "psychological security"? What additional insights can be provided by this integrative perspective?

The evolutionary psychological literature has seen growing interest in the effects of environmental insecurity on human behavior and health. In particular, Belsky and colleagues have posited several models explicating this through the lens of life-history trade-offs. In these models, attachment and family dynamics function as a buffer and transmitter of external environmental conditions that the child will eventually experience when they grow up. The child's psychological security is conceived as a behavioral cue that calibrates her life history strategy, which ranges from a "fast" one that prioritizes rapid reproduction to a "slow" one that prioritizes long-term investment in personal development.

Belsky, J., Steinberg, L., & Draper, P. (1991). Childhood experience, interpersonal development, and reproductive strategy: An evolutionary theory of socialization. Child development, 62(4), 647-670.

de Baca, T. C., & Ellis, B. J. (2017). Early stress, parental motivation, and reproductive decision-making: applications of life history theory to parental behavior. Current opinion in psychology, 15, 1-6.

Another general concern has to do with the nature of psychological insecurity. Although the authors clearly linked psychological security to the need for safety (p. 3, section 2.1, "we argue that 'sense of safety' and 'psychological security' are distinct yet related constructs; the former centers on how individuals assess and evaluate the safety or threats in their environment, while the latter emphasizes the subjective emotional state stemming from this environmental perception.")



However, later on, the authors also brought up theories like the Social Self-Preservation Theory and the Tripartite Security System Theory. This expanded the conceptual boundary of "psychological security" to encompass notions of social acceptance and self-esteem (which constitute a higher-level need according to Maslow). However, it is unclear how these different notions of psychological security should be unified in an evolutionary explanatory framework. Does psychological insecurity caused by the perception of extrinsic danger to one's physical well-being produce the same type of cognitive, emotional, and neurophysiological responses as that caused by social threats to one's self-esteem? If the answer is no, then it is probably not a good idea to conflate these concepts in one paper.

Again, from the life-history perspective, researchers have identified several fundamental environmental insecurities (harshness, unpredictability, and density-dependent factors such as population density and competition; Ellis et al., 2009; Yang et al., 2022), which contribute to psychological insecurity. Empirical research has also examined the role of a "sense of control" in behavioral decisions, which mediates the interaction between the level of childhood financial security and situational cues of uncertainty (Mittal & Griskevicius, 2014).

The current manuscript, in contrast, seems to be rather vague regarding the nature and the source of psychological security. It is very difficult, if not impossible, to draw concrete hypotheses (or provide policy suggestions) without specifying what type of insecurity the authors are talking about.

Ellis, B. J., Figueredo, A. J., Brumbach, B. H., & Schlomer, G. L. (2009). Fundamental dimensions of environmental risk: The impact of harsh versus unpredictable environments on the evolution and development of life history strategies. Human nature, 20, 204-268.

Mittal, C., & Griskevicius, V. (2014). Sense of control under uncertainty depends on people's childhood environment: A life history theory approach. *Journal of Personality and Social Psychology*, 107(4), 621–637.

Yang, A., Zhu, N., Lu, H. J., & Chang, L. (2022). Environmental risks, life history strategy, and developmental psychology. PsyCh Journal, 11(4), 433–447.

The same concern of conceptual vagueness also applies to the discussion about group-level variations in psychological security. For example, the authors wrote on p. 14, "people are more likely to adopt collectivist values or prioritize protecting group values when facing a significant psychological threat". However, recent evidence seems to paint a more nuanced picture of the relationship between different types of environmental threats and collectivist values. For example, Zhu et al. (2021) examined data from the World Values Survey and found that society-level threats of intergroup violence undermine not just outgroup trust but also ingroup trust, whereas society-level disease threats (as well as individual perception of resource insecurity) undermine ingroup trust but not outgroup trust. Nevertheless, Zhu and colleagues did find that collectivism is associated with a stronger tendency to endorse collective defense against disease threats, but mainly for individuals who have a strong sense of control and when the threats are ambivalent (Zhu et al., 2023).

Zhu, N., Lu, H. J., & Chang, L. (2021). Trust as social investment: a life-history model of environmental effects on ingroup and outgroup trust. Personality and Individual Differences, 168, 110303. https://doi.org/10.1016/j.paid.2020.110303



Zhu, N., Li, Y., & Chang, L. (2023). Collectivistic orientation moderates the effect of personal control on evaluations of societal disease-control measures: During and beyond the COVID-19 crisis in China. Asian Journal of Social Psychology.

Overall, the manuscript could be improved if it clarifies which set of environmental threats is linked to which set of cognitive, emotional, behavioral, and physiological responses.