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Dear Editor,

Please consider our manuscript entitled “*Quantity discrimination, decision-making, and the role of early-life conditions in a lizard*” for publication in **Behavioral Ecology and Sociobiology**.

Numerical cognition – the ability to discriminate between quantities – is crucial for animals in foraging and other adaptive behaviors, and it is spread among different taxa. However, there is mixed evidence about whether reptiles are able of discerning between different quantities and what are the cognitive systems involved. The conditions in which animals develop can play a prominent role in determining quantity discrimination and decision-making through effects on brain development. While prenatal stress hormones and incubation temperature are known to affect various aspects of cognitive function, the interaction between these factors and their combined impact on numerical discrimination remain poorly understood. Using a multi-experimental approach manipulating both early temperature and corticosterone levels on eggs, we demonstrate that decision-making is not significantly affected by these early environmental conditions in the common garden skink (*Lampropholis guichenoti*), suggesting that other factors may mediate cognitive development in this species. However, our results indicate that *L. guichenoti* does not discriminate between quantities in a spontaneous choice task, raising the possibility that this species lack numerical discrimination abilities in certain contexts.

Our novel findings have significant implications for the field of cognitive ecology and are likely to inspire new research on how developmental environments influence numerical cognition and decision-making, which can be crucial for understanding ecological foraging strategies, and the adaptive significance of cognitive abilities in variable environments. We believe this makes our work particularly suitable for a general journal like **Behavioral Ecology and Sociobiology**, and we hope you share this perspective.

We confirm that this manuscript has not been published elsewhere and is not currently under consideration for publication in any other journal. All authors have approved the manuscript for submission and declare no conflicts of interest.

Thank you for considering our manuscript for publication. We look forward to hearing from you.

Sincerely,

Pablo Recio Santiago

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