Risk-taking neonates do not pay a survival cost in a free-ranging large mammal

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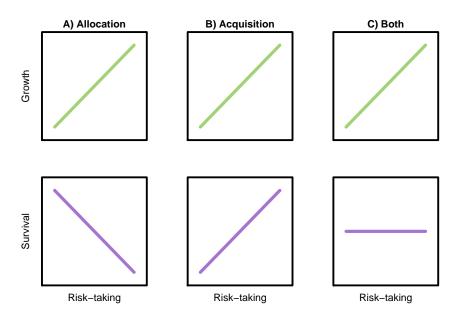
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Abstract

Recent debate has focused on whether variation in personality primarily reflects variation in resource allocation or resource acquisition of individuals. These two mechanisms differ in their expected patterns between personality and survival. If personality mainly reflects variation in resource allocation, then bold (i.e. risk-taking) individuals are expected to live shorter, whereas the opposite pattern is expected with resource acquisition. Here we studied the relationship between neonate personality and early-life survival in 269 juveniles of a population of fallow deer (Dama dama). We found that bolder individuals were more likely to survive, and therefore, paid no apparent survival cost. Interestingly, the physiological but not the behavioural dimension of neonate boldness was directly linked to survival, suggesting that these individuals may be of higher state than their shyer counterparts. As the first study linking neonate personality to survival in a free-ranging mammal, we provide novel insights into drivers behind early-life individual variation.

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