How years of 'prolonged immaturity' as babies provide humans with an evolutionary advantage

[H]uman babies, as well as the young of many other species of mammals and birds, require months or years of care before they reach full mobility and sensory function, let alone maturity.

This prolonged period of immaturity and helplessness – or altriciality – in human babies and other species, long thought to be a drain on resources, is actually an evolutionary advantage, say Cornell researchers.

. . .

"Protracted immaturity and dependence on paternal care is not an unfortunate byproduct of our evolution but instead a highly adaptive trait of our species, which has enabled human infants to efficiently organize attention to social agents and learn efficiently from social output," they wrote. "The evolutionary goal of altricial species is not to become highly competent as quickly as possible but rather to excel at learning over time."

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Human infants need to acquire complex social skills, including language, empathy, morality and theory of mind, the researchers said. Successful development of these skills depends on information from adults: "Rather than requiring hard-wired, innate knowledge of social abilities, evolution has outsourced the necessary information to parents," they wrote.

Ecologically, prolonged altricial development may give species the ability to adapt to changing or new environments, [researcher Katerina] Faust said.

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