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*Our web collection on [statistics for biologists](#) contains articles on many of the points above.*

### Software and code

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Data collection

No software used.

Data analysis

Data analysed in R v3.5.0. All analyses used base R functions or code provided in previously published R packages. Code used to run our analyses is available at <https://github.com/christophercooney/Avian-developmental-durations>.

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All data analysed in this study is provided as part of the Source Data file accompanying the manuscript.

### Field-specific reporting

Please select the one below that is the best fit for your research. If you are not sure, read the appropriate sections before making your selection.

- Life sciences       Behavioural & social sciences       Ecological, evolutionary & environmental sciences

## Ecological, evolutionary & environmental sciences study design

All studies must disclose on these points even when the disclosure is negative.

Study description	This study analyses data from over 3000 bird species in a phylogenetic comparative framework to test hypotheses for factors influencing variation in developmental durations across species.
Research sample	This research was focused on birds and the research sample consisted of the total number of species for which we could find published information regarding developmental durations (3096 species).
Sampling strategy	Sampling was dictated by the availability of published information regarding developmental durations.
Data collection	We recorded information from published sources (e.g. journal articles, handbooks, published compilations etc.) regarding the length of developmental periods for as many bird species as possible. We also collected a more detailed dataset of embryonic developmental time points for 20 species from published developmental studies. We combined this a mix of previously published and newly collected data describing interspecific variation in species' life history, ecological and geographic traits. Published data were extracted from the relevant repositories and newly collected data were assembled in a similar way to developmental duration data (i.e. collated from literature searches and published sources). Full details are provided in the main text.
Timing and spatial scale	Data were collected from the literature over the period of several years for a global sample of bird species.
Data exclusions	To improve data quality we removed clear outliers that must reflect measurement error (i.e. incubation lengths < 8 or > 90 days; n = 6). This is stated in the main text.
Reproducibility	N/A - study is not experimental.
Randomization	N/A - data were collected for as many extant bird species as possible, with final sample size dictated by data availability.
Blinding	N/A - data were collected for as many extant bird species as possible, with final sample size dictated by data availability.
Did the study involve field work?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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<input checked="" type="checkbox"/>	<input type="checkbox"/> Clinical data

### Methods

n/a	Involvement in the study
<input checked="" type="checkbox"/>	<input type="checkbox"/> ChIP-seq
<input checked="" type="checkbox"/>	<input type="checkbox"/> Flow cytometry
<input checked="" type="checkbox"/>	<input type="checkbox"/> MRI-based neuroimaging