Supplementary Material

Meta-analysis reveals weak associations between intrinsic state and personality

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Glossary:

Supplementary text S1. Search terms used in our Web Of Science and Scopus searches.

("behavio* syndrome" AND "body size") OR ("pace-of-life" AND "body size") OR ("pace of life" AND "body size") OR ("coping style" AND "body size") OR ("animal personalit*" AND "body size") OR ("animal personalit*" AND "mass") OR ("coping style" AND "mass") OR ("behavio* syndrome" AND "mass") OR ("pace-of-life" AND "mass") OR ("pace of life" AND "mass") OR ("animal personalit*" AND "weight") OR ("coping style" AND "weigh") OR ("behavio* syndrome" AND "weigh") OR ("pace of life" AND "weight") OR ("pace-of-life" AND "weight") OR ("behavio* syndrome" AND "cortisol") OR ("pace-of-life" AND " cortisol ") OR ("pace of life" AND "cortisol") OR ("pace of life" AND "cortisol ") OR ("coping style" AND "cortisol") OR ("animal personalit*" AND "cortisol") OR ("behavio* syndrome" AND "testosterone") OR ("behavio* syndrome" AND "corticosterone") OR ("pace-of-life" AND "corticosterone") OR ("pace-of-life" AND "testosterone") OR ("pace of life" AND "corticosterone") OR ("pace of life" AND "testosterone") OR ("coping style" AND "testosterone") OR ("coping style" AND "corticosterone") OR ("animal personalit*" AND "corticosterone") OR ("animal personalit*" AND "testosterone") OR ("animal personalit*" AND "hormon*") OR ("coping style" AND "hormon*") OR ("behavio* syndrome" AND "hormon*") OR ("pace of life" AND "hormon*") OR ("pace-of-life" AND "hormon*") OR ("animal personalit*" AND "metabolic rate") OR ("coping style" AND "metabolic rate") OR ("behavio* syndrome" AND "metabolic rate") OR ("pace of life" AND "metabolic rate") OR ("pace-of-life" AND "metabolic rate").

Supplementary Table 1. Estimates of among-individual correlations used for our meta-analysis, grouped by the type of intrinsic state variable: (a) body mass, b) body size, c) hormones and d) metabolic rate). For each estimate, we print an abbreviated reference to the study, the study species (English followed by Latin name), the type of behaviour assayed, the type of state variable ("Moderator" variable), the correlation coefficient, and its statistical error (Standard error, SE, or 95% confidence/credible interval, 95% CI). Correlation coefficients that were multiplied by -1 (see Main Text) are highlighted in bold-face. SMR = standard metabolic rate, RMR = resting metabolic rate, PeakMR = peak metabolic rate, DEE = daily energy expenditure, CORT = corticosterone.

Study	Species	Behaviour	Moderator	*r*	Error (SE or *95%CI*)
a)					
[1]	Southern field cricket *Gryllus bimaculatus*	Exploration	Body mass	-0.310	0.150
[1]	Southern field cricket *Gryllus bimaculatus*	Aggression	Body mass	0.250	0.150
[1]	Southern field cricket *Gryllus bimaculatus*	Mating behaviour	Body mass	-0.150	0.150
Han et al. Unpublished I	Southern field cricket *Gryllus bimaculatus*	Aggression	Body mass	0.465	0.067
Han et al. Unpublished I	Southern field cricket *Gryllus bimaculatus*	Aggression	Body mass	0.153	0.101
Han et al. Unpublished I	Southern field cricket *Gryllus bimaculatus*	Exploration	Body mass	-0.172	0.059
Han et al. Unpublished I	Southern field cricket *Gryllus bimaculatus*	Exploration	Body mass	0.019	0.073
Han et al. Unpublished II	Southern field cricket *Gryllus bimaculatus*	Aggression	Body mass	0.233	0.088
Han et al. Unpublished II	Southern field cricket *Gryllus bimaculatus*	Aggression	Body mass	0.132	0.11
Han et al. Unpublished II	Southern field cricket *Gryllus bimaculatus*	Exploration	Body mass	-0.111	0.057
Han et al. Unpublished II	Southern field cricket *Gryllus bimaculatus*	Exploration	Body mass	-0.112	0.068
[2]	Canary *Serinus canaria*	Song repertoire	Body mass	0.100	0.160
[2]	Canary *Serinus canaria*	Song activity	Body mass	-0.040	0.160
[2]	Canary *Serinus canaria*	Song consistency	Body mass	-0.280	0.160
[2]	Canary *Serinus canaria*	Mate provisioning	Body mass	0.060	0.160
[2]	Canary *Serinus canaria*	Provisioning rate	Body mass	-0.330	0.150
[2]	Canary *Serinus canaria*	Provisioning rate	Body mass	-0.360	0.160

[3]	Southern corroboree frog *Pseudophryne corroboree*	Activity	Body mass	-0.010	0.307
[3]	Southern corroboree frog *Pseudophryne corroboree*	Exploration	Body mass	0.640	0.153
[3]	Southern corroboree frog *Pseudophryne corroboree*	Boldness	Body mass	**0.320**	0.264
Moiron et al. Unpublished	Great tit *Parus major*	Aggression	Body mass	-0.12	0.102
Moiron et al. Unpublished	Great tit *Parus major*	Exploration	Body mass	-0.02	0.071
Niemela et al. Unpublished	Southern field cricket *Gryllus bimaculatus*	Exploration	Body mass	-0.19	0.080
[4]	House cricket *Acheta domesticus*	Activity	Body mass	0.220	*-0.07,0.58*
[4]	House cricket *Acheta domesticus*	Activity	Body mass	0.250	*-0.02,0.56*
[4]	House cricket *Acheta domesticus*	Response to predator cue	Body mass	0.01	*-0.41,0.33*
[4]	House cricket *Acheta domesticus*	Response to predator cue	Body mass	0.39	*0.02,0.62*
[5]	House cricket *Acheta domesticus*	Activity	Body mass	0.16	*-0.26,0.51*
[5]	House cricket *Acheta domesticus*	Exploration	Body mass	0.13	*-0.24,0.52*
[6]	Green swordtail *Xiphophorus helleri*	Aggression	Body mass	0.015	0.284
[6]	Green swordtail *Xiphophorus helleri*	Aggression	Body mass	0.238	0.216
[6]	Green swordtail *Xiphophorus helleri*	Aggression	Body mass	-0.746	0.257
[6]	Green swordtail *Xiphophorus helleri*	Aggression	Body mass	0.428	0.214
[6]	Green swordtail *Xiphophorus helleri*	Aggression	Body mass	0.244	0.298
[6]	Green swordtail *Xiphophorus helleri*	Aggression	Body mass	0.609	0.232
[6]	Green swordtail *Xiphophorus helleri*	Aggression	Body mass	-0.210	0.290
[6]	Green swordtail *Xiphophorus helleri*	Aggression	Body mass	0.562	0.190
[6]	Green swordtail *Xiphophorus helleri*	Aggression	Body mass	**0.287**	0.280
[6]	Green swordtail *Xiphophorus helleri*	Aggression	Body mass	**-0.645**	0.268
[7]	Sheepshead swordtail *Xiphophorus birchmanni*	Aggression	Body mass	0.741	0.151
[7]	Sheepshead swordtail *Xiphophorus birchmanni*	Aggression	Body mass	0.479	0.256
[7]	Sheepshead swordtail *Xiphophorus birchmanni*	Aggression	Body mass	0.436	0.290
[7]	Sheepshead swordtail *Xiphophorus birchmanni*	Aggression	Body mass	0.508	0.229
[7]	Sheepshead swordtail *Xiphophorus birchmanni*	Aggression	Body mass	0.667	0.179
[7]	Sheepshead swordtail *Xiphophorus birchmanni*	Aggression	Body mass	**0.721**	0.413
[7]	Sheepshead swordtail *Xiphophorus birchmanni*	Aggression	Body mass	0.967	0.178
[7]	Sheepshead swordtail *Xiphophorus birchmanni*	Dominance	Body mass	0.480	0.276
[7]	Sheepshead swordtail *Xiphophorus birchmanni*	Dominance	Body mass	0.004	0.334

[8]	Red Knot *Calidris canutus*	Exploration	Body mass	-0.840	*-0.96,-0.45*
[9]*	Brazilian guinea pig *Cavia aperea*	Boldness	Body mass	**-0.082**	0.299
[9]*	Brazilian guinea pig *Cavia aperea*	Exploration	Body mass	**-0.353**	0.23
[9]*	Brazilian guinea pig *Cavia aperea*	Exploration	Body mass	0.019	0.385
[10]	European field cricket *Gryllus campestris*	Aggression	Body mass	0.43	0.16
[10]	European field cricket *Gryllus campestris*	Exploration	Body mass	0.22	0.14
[10]	European field cricket *Gryllus campestris*	Activity	Body mass	0.17	0.15
Krams et al. Unpublished*	Western Stutter-trilling Cricket *Gryllus integer*	Boldness	Body mass	**0.102**	0.086
Krams et al. Unpublished*	Western Stutter-trilling Cricket *Gryllus integer*	Exploration	Body mass	**-0.084**	0.087
b)					
[11]*	*Barnacle goose Branta leucopsis*	Activity	Tarsus	-0.068	0.51
[11]*	*Barnacle goose Branta leucopsis*	Activity	Head	-0.113	0.506
[11]*	*Barnacle goose Branta leucopsis*	Activity	Wing	-0.559	0.274
[11]*	*Barnacle goose Branta leucopsis*	Boldness	Tarsus	-0.096	0.384
[11]*	*Barnacle goose Branta leucopsis*	Boldness	Head	0.323	0.346
[11]*	*Barnacle goose Branta leucopsis*	Boldness	Wing	-0.059	0.386
Moiron et al. Unpublished	Great tit *Parus major*	Exploration	Wing	-0.01	*-0.10,0.08*
Moiron et al. Unpublished	Great tit *Parus major*	Exploration	Bill	-0.07	*-0.16,0.03*
Moiron et al. Unpublished	Great tit *Parus major*	Exploration	Tarsus	-0.06	*-0.17,0.03*
Moiron et al. Unpublished	Great tit *Parus major*	Aggression	Wing	-0.11	*-0.22,0.00*
Moiron et al. Unpublished	Great tit *Parus major*	Aggression	Bill	0.01	*-0.11,0.11*
Moiron et al. Unpublished	Great tit *Parus major*	Aggression	Tarsus	-0.08	*-0.20,0.03*
[12]	Guppy *Poecilia reticulata*	Boldness	Body length	**-0.436**	0.231
[12]	Guppy *Poecilia reticulata*	Boldness	Body length	0.324	0.224
[12]	Guppy *Poecilia reticulata*	Boldness	Body length	0.315	0.238
[12]	Guppy *Poecilia reticulata*	Boldness	Body length	0.2	0.225
[12]	Guppy *Poecilia reticulata*	Boldness	Body length	-0.091	0.242
[12]	Guppy *Poecilia reticulata*	Boldness	Body length	0.383	0.187
[13]	Blue tit *Cyanistes caeruleus*	Activity	Tarsus	0.1	0.084
[13]	Blue tit *Cyanistes caeruleus*	Aggression	Tarsus	-0.031	0.068
[14]	Southern field cricket *Gryllus bimaculatus*	Exploration	Femur	-0.13	0.04

[14]	Southern field cricket *Gryllus bimaculatus*	Aggression	Femur	0.30	0.06
[6]	Green swordtail *Xiphophorus helleri*	Aggression	Body length	-0.068	0.282
[6]	Green swordtail *Xiphophorus helleri*	Aggression	Body length	0.209	0.217
[6]	Green swordtail *Xiphophorus helleri*	Aggression	Body length	-0.824	0.247
[6]	Green swordtail *Xiphophorus helleri*	Aggression	Body length	0.298	0.231
[6]	Green swordtail *Xiphophorus helleri*	Aggression	Body length	-0.017	0.305
[6]	Green swordtail *Xiphophorus helleri*	Aggression	Body length	0.388	0.261
[6]	Green swordtail *Xiphophorus helleri*	Aggression	Body length	-0.365	0.278
[6]	Green swordtail *Xiphophorus helleri*	Aggression	Body length	0.432	0.212
[6]	Green swordtail *Xiphophorus helleri*	Aggression	Body length	**0.467**	0.264
[6]	Green swordtail *Xiphophorus helleri*	Aggression	Body length	**-0.62**	0.264
[2]	Canary *Serinus canaria*	Repertoire	Tarsus	-0.18	0.16
[2]	Canary *Serinus canaria*	Song activity	Tarsus	0.37	0.15
[2]	Canary *Serinus canaria*	Song consistency	Tarsus	-0.23	0.17
[2]	Canary *Serinus canaria*	Offspring provisioning	Tarsus	-0.05	0.17
[2]	Canary *Serinus canaria*	mate provisioning	Tarsus	0.18	0.17
c)					-
[15]	Sheepshead swordtail *Xiphophorus birchmanni*	Activity	CORT (stress)	0.785	0.391
[15]	Sheepshead swordtail *Xiphophorus birchmanni*	Activity	Ketotestosterone	0.383	0.350
[16]	Belding's ground squirrel *Urocitellus beldingi*	Exploration	CORT (stress)	-0.207	*-0.569,0.45*
[16]	Belding's ground squirrel *Urocitellus beldingi*	Activity	CORT (stress)	-0.028	*-0.421,0.608*
[16]	Belding's ground squirrel *Urocitellus beldingi*	Docility	CORT (stress)	**-0.095**	*-0.388,0.554*
[17]	Alpine marmot *Marmota marmota*	Activity	CORT (stress)	0.040	*-0.56,0.71*
[17]	Alpine marmot *Marmota marmota*	Impulsivity	CORT (stress)	0.080	*-0.68,0.62*
[17]	Alpine marmot *Marmota marmota*	Docility	CORT (stress)	**-0.140**	*-0.64,0.63*
[2]	Canary *Serinus canaria*	Song repertoire	Testosterone	0.59	0.160
[2]	Canary *Serinus canaria*	Song activity	Testosterone	0.34	0.150
[2]	Canary *Serinus canaria*	Song consistency	Testosterone	0.25	0.160
[2]	Canary *Serinus canaria*	Mate provisioning	Testosterone	0.04	0.150
[2]	Canary *Serinus canaria*	Provisioning rate	Testosterone	-0.14	0.150
[2]	Canary *Serinus canaria*	Provisioning rate	Testosterone	-0.06	0.160

[18]*	House sparrow *Passer domesticus*	Exploration	Testosterone	0.005	0.762
[9]*	Brazilian guinea pig *Cavia aperea*	Boldness	CORT (baseline)	**-0.062**	0.286
[9]*	Brazilian guinea pig *Cavia aperea*	Exploration	CORT (baseline)	**-0.767**	0.193
[9]*	Brazilian guinea pig *Cavia aperea*	Exploration	CORT (baseline)	-0.439	0.422
[19]*	Brazilian guinea pig *Cavia aperea*	Boldness	CORT (baseline)	-0.126	0.573
[19]*	Brazilian guinea pig *Cavia aperea*	Boldness	CORT (stress)	0.46	0.352
[19]*	Brazilian guinea pig *Cavia aperea*	Boldness	CORT (baseline)	**0.53**	0.411
[19]*	Brazilian guinea pig *Cavia aperea*	Boldness	CORT (stress)	**0.31**	0.227
[19]*	Brazilian guinea pig *Cavia aperea*	Exploration	CORT (baseline)	0.231	0.361
[19]*	Brazilian guinea pig *Cavia aperea*	Exploration	CORT (stress)	0.183	0.218
[19]*	Brazilian guinea pig *Cavia aperea*	Exploration	CORT (baseline)	-0.683	0.428
[19]*	Brazilian guinea pig *Cavia aperea*	Exploration	CORT (stress)	-0.152	0.247
d)					
[20]	Human *Homo sapiens*	Activity	BMR	0.493	0.274
[20]	Human *Homo sapiens*	Activity	BMR	0.623	0.220
[21]	Eastern chipmunk *Tamias striatus*	Docility	RMR	**-0.041**	*-0.254,0.23*
[21]	Eastern chipmunk *Tamias striatus*	Docility	DEE	**-0.177**	*-0.119,0.473*
[21]	Eastern chipmunk *Tamias striatus*	Exploration	RMR	-0.143	*-0.447,0.136*
[21]	Eastern chipmunk *Tamias striatus*	Exploration	DEE	-0.316	*-0.709,-0.026*
[22]	Ouachita Dusky Salamander *Desmognathus brimleyorum*	Exploration	SMR	-0.600	0.270
[22]	Ouachita Dusky Salamander *Desmognathus brimleyorum*	Feeding rate	SMR	0.600	0.190
[22]	Ouachita Dusky Salamander *Desmognathus brimleyorum*	Exploration	SMR	-0.410	0.410
[22]	Ouachita Dusky Salamander *Desmognathus brimleyorum*	Feeding rate	SMR	0.250	0.330
[23]	Western Trilling Cricket *Gryllus integer*	Boldness	RMR	**-0.318**	0.085
[23]	Western Trilling Cricket *Gryllus integer*	Exploration	RMR	**0.345**	0.082
[5]	House cricket *Acheta domesticus*	Exploration	RMR	0.150	*-0.27,0.48*
[5]	House cricket *Acheta domesticus*	Activity	RMR	0.020	*-0.43,0.34*
[24]*	Guppy *Poecilia reticulata*	Activity	Peak MR	-0.039	0.272
[24]*	Guppy *Poecilia reticulata*	Boldness	Peak MR	0.276	0.238
[24]*	Guppy *Poecilia reticulata*	Voracity	Peak MR	0.100	0.261
[24]*	Guppy *Poecilia reticulata*	Display	Peak MR	-0.474	0.228

[24]*	Guppy *Poecilia reticulata*	Chase	Peak MR	0.095	0.284
[9]*	Brazilian guinea pig *Cavia aperea*	Boldness	RMR	**0.458**	0.375
[9]*	Brazilian guinea pig *Cavia aperea*	Exploration	RMR	**0.260**	0.292
[9]*	Brazilian guinea pig *Cavia aperea*	Exploration	RMR	0.113	0.465
[25]*	Yellow Mealworm Beetle *Tenebrio molitor*	Exploration	RMR	0.704	0.040
[25]*	Yellow Mealworm Beetle *Tenebrio molitor*	Exploration	RMR	**0.515**	0.055
[25]*	Yellow Mealworm Beetle *Tenebrio molitor*	Boldness	RMR	0.649	0.050
[25]*	Yellow Mealworm Beetle *Tenebrio molitor*	Boldness	RMR	**0.583**	0.048

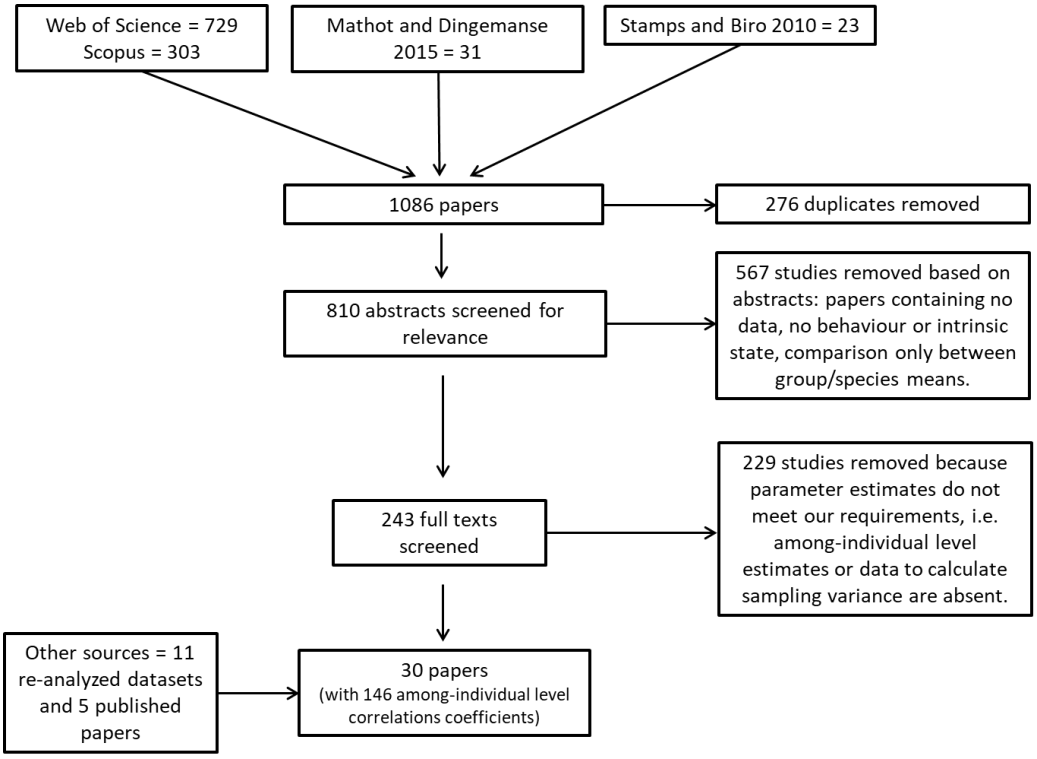
* Data re-analyzed

Supplementary Table 2. Heterogeneity estimates (with standard errors in brackets) for our standard meta-analytical model either with phylogeny, species identity or study identity fitted as random effect. I^2 represents the proportion of variance among effect sizes explained by a focal variance component after excluding the total sampling error variance

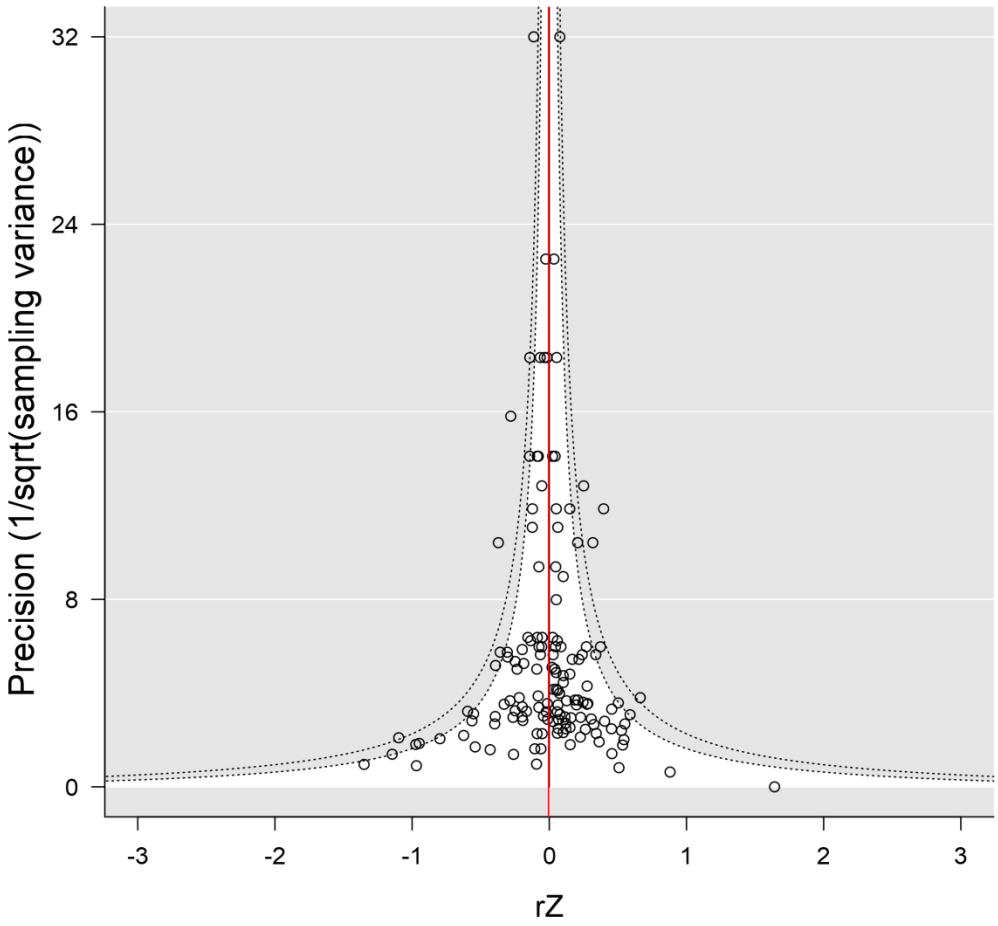
	I^2 Focal random effect	I^2 Residual	I^2 Total
Phylogeny	0.65 (0.12)	0.21 (0.09)	0.86 (0.04)
Species ID	0.56 (0.12)	0.27 (0.09)	0.83 (0.05)
Study ID	0.46 (0.12)	0.34 (0.10)	0.80 (0.04)

Supplementary Table 3. Estimates (mode) of *r* (correlation coefficient), $|r|$ (absolute magnitude of correlation coefficient) and $|r|^2$ (squared absolute magnitude of correlation coefficient) between behaviour and the physiology for three standard models controlled either for phylogeny, species identity or study identity. We present here the point estimates (mode) with 95% Credible Intervals (in brackets) derived from standard multilevel meta-analytic models.

	r	$\|r\|$	$\|r^2\|$
Phylogeny	0.139 (-0.124; 0.425)	0.268 (0.191; 0.458)	0.073 (0.036; 0.201)
Species ID	0.105 (-0.009; 0.228)	0.245 (0.179; 0.335)	0.060 (0.029; 0.108)
Study ID	0.101 (0.011; 0.184)	0.216 (0.168; 0.278)	0.047 (0.028; 0.076)



Supplementary Figure 1. PRISMA diagram summarizing our literature search.



Supplementary Figure 2. Funnel plot of precision for z-transformed among-individual correlation coefficients (rZ) between state and behavioural traits. Inner and outer dashed lines indicate pseudo-95% and 99% confidence intervals, respectively. The red vertical line indicates a zero effect.

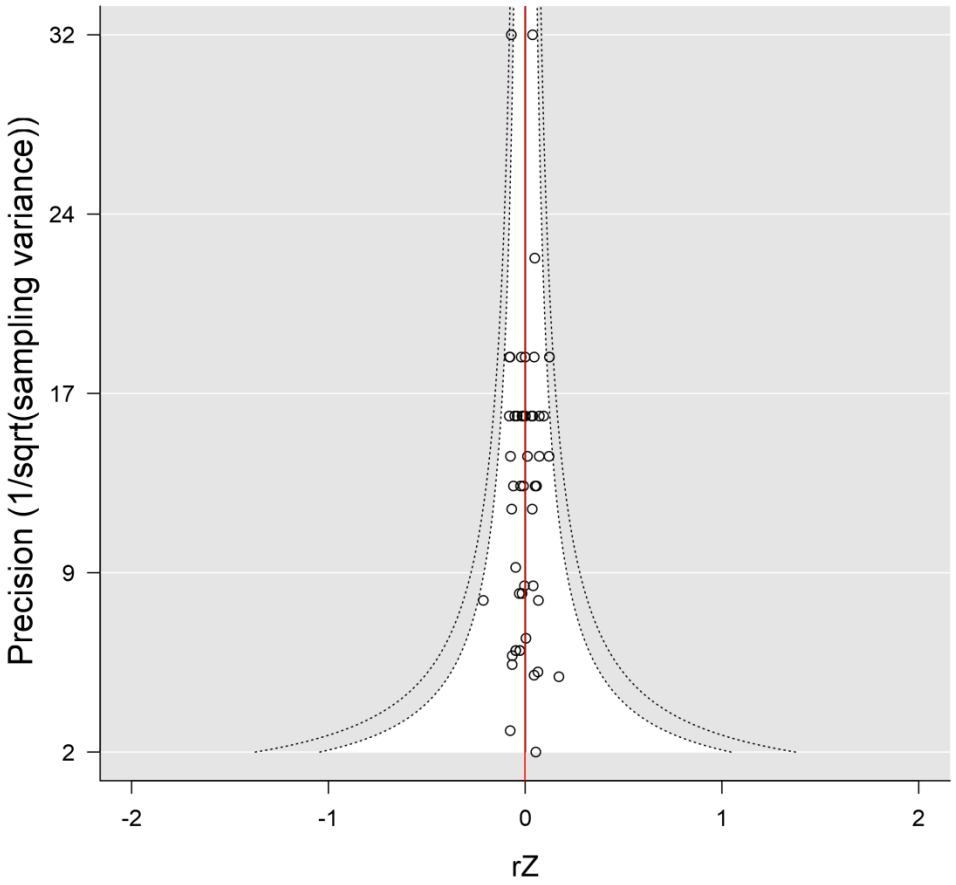
Supplementary Text S2: Within-individual correlations

Methodology

From the 30 papers used to extract material for our analyses of among-individual level correlations (see Supplementary Figure 1), we also extracted a total of 49 within-individual correlations between behavior and internal state (listed in Supplementary Table 4). We used a standard meta-analytical model, identical to the one described in the main text, to retrieve meta-analytical estimates of *r*, $|r|$ and $|r|^2$ at the within-individual level. Note, however, that for within-individual correlations the transformation of 95% credible intervals into standard errors was appropriately achieved using Eqn. S1 as it required information both on *n* (the number of individuals) and k (the average number of repeats per individuals):

$$SE = \frac{(upper - lower\ CI)}{2t_{n\bar{k}-3}} \quad \text{Eqn. S1}$$

We further used the same approach as described in the main text to estimate the presence of publication bias. Funnel plots of precision (Supplementary Figure 3) and Egger's regression (P = 0.751) suggested a lack of publication bias, similar to our results for the among-individual correlation estimates (Main Text).



Supplementary Figure 3. Funnel plot of precision for z-transformed within-individual correlation coefficients (rZ) between state and behavioural traits. Inner and outer dashed lines indicate pseudo-95% and 99% confidence intervals, respectively. The red vertical line indicates a zero effect.

Results

The average within-individual correlation between state and behaviour did not differ from zero (r = [mean, 95 CI] 0.002, -0.032; 0.047). The absolute average correlation was positive and significant, but small ($|r|$ = 0.060, 0.034; 0.86) implying that variation in state does not represent an important factor explaining variation in behavioural expression within individuals. Indeed, within-individual variation in

state explained a near-zero proportion of the variation in behaviour within-individuals ($|r|^2$ = 0.003, 0.001; 0.007).

Supplementary Table 4. Within-individual correlation estimates used in our meta-analysis, grouped by the type of intrinsic state variable (a) body mass, b) hormones and c) metabolic rate). For each estimate, we print an abbreviated reference to the study, the study species (English followed by Latin name), the type of behaviour assayed, the type of state variable (Moderator), the correlation coefficient, statistical error term. Correlation coefficients that were multiplied by -1 (see Main Text) are highlighted in bold-face. SMR = standard metabolic rate, RMR = resting metabolic rate, DEE = daily energy expenditure, CORT = corticosterone.

Study	Species	Behaviour	Moderator	r	Error (SE or *95%CI*)
a)					
[1]	Southern field cricket *Gryllus bimaculatus*	Exploration	Body mass	-0.110	0.060
[1]	Southern field cricket *Gryllus bimaculatus*	Aggression	Body mass	-0.070	0.060
[1]	Southern field cricket *Gryllus bimaculatus*	Mating behaviour	Body mass	0.010	0.060
Han et al. Unpublished I	Southern field cricket *Gryllus bimaculatus*	Aggression	Body mass	0.19	0.053
Han et al. Unpublished I	Southern field cricket *Gryllus bimaculatus*	Aggression	Body mass	0.054	0.060
Han et al. Unpublished I	Southern field cricket *Gryllus bimaculatus*	Exploration	Body mass	0.115	0.052
Han et al. Unpublished I	Southern field cricket *Gryllus bimaculatus*	Exploration	Body mass	-0.01	0.057
Han et al. Unpublished II	Southern field cricket *Gryllus bimaculatus*	Aggression	Body mass	0.007	0.047
Han et al. Unpublished II	Southern field cricket *Gryllus bimaculatus*	Aggression	Body mass	-0.119	0.056
Han et al. Unpublished II	Southern field cricket *Gryllus bimaculatus*	Exploration	Body mass	-0.004	0.029
Han et al. Unpublished II	Southern field cricket *Gryllus bimaculatus*	Exploration	Body mass	-0.111	0.033
[2]	Canary *Serinus canaria*	Song repertoire	Body mass	0.110	0.060
[2]	Canary *Serinus canaria*	Song activity	Body mass	-0.060	0.360
[2]	Canary *Serinus canaria*	Song consistency	Body mass	0.070	0.530
Moiron et al. Unpublished	Great tit *Parus major*	Aggression	Body mass	-0.01	-0.12,0.1
Moiron et al. Unpublished	Great tit *Parus major*	Exploration	Body mass	-0.03	-0.13,0.07
Niemela et al. Unpublished	Southern field cricket *Gryllus bimaculatus*	Exploration	Body mass	0.070	0.060
[4]	House cricket *Acheta domesticus*	Activity	Body mass	-0.050	-0.21,0.11
[4]	House cricket *Acheta domesticus*	Activity	Body mass	0.030	-0.09,0.19

[4]	House cricket *Acheta domesticus*	Response to predator cue	Body mass	0.010	-0.15,0.16
[4]	House cricket *Acheta domesticus*	Response to predator cue	Body mass	0.090	-0.04,0.23
[5]	House cricket *Acheta domesticus*	Activity	Body mass	0.05	-0.14,0.17
[5]	House cricket *Acheta domesticus*	Exploration	Body mass	-0.060	-0.08,0.22
[10]	European field cricket *Gryllus campestris*	Aggression	Body mass	0.05	0.06
[10]	European field cricket *Gryllus campestris*	Exploration	Body mass	0.13	0.06
[10]	European field cricket *Gryllus campestris*	Activity	Body mass	0.06	0.06
[8]	Red Knot *Calidris canutus*	Exploration	Body mass	0.13	-0.35,0.44
b)					
[15]	Sheepshead swordtail *Xiphophorus birchmanni*	Activity	CORT (stress)	-0.026	0.116
[15]	Sheepshead swordtail *Xiphophorus birchmanni*	Activity	Ketotestosterone	-0.052	0.116
[16]	Belding's ground squirrel *Urocitellus beldingi*	Exploration	CORT (stress)	-0.065	-0.185,0.063
[16]	Belding's ground squirrel *Urocitellus beldingi*	Activity	CORT (stress)	-0.035	-0.191,0.104
[16]	Belding's ground squirrel *Urocitellus beldingi*	Docility	CORT (stress)	***0.046***	-0.146,0.159
[17]	Alpine marmot *Marmota marmota*	Activity	CORT (stress)	0.270	-0.1,0.64
[17]	Alpine marmot *Marmota marmota*	Impulsivity	CORT (stress)	0.150	-0.19,0.58
[17]	Alpine marmot *Marmota marmota*	Docility	CORT (stress)	***0.040***	-0.42,0.26
[2]	Canary *Serinus canaria*	Song repertoire	Testosterone	0.020	0.150
[2]	Canary *Serinus canaria*	Song activity	Testosterone	0.000	0.120
[2]	Canary *Serinus canaria*	Song consistency	Testosterone	-0.050	0.180
[18]*	House sparrow *Passer domesticus*	Activity	Testosterone	-0.042	0.106
[18]*	House sparrow *Passer domesticus*	Exploration	Testosterone	0.047	0.112
c)					
[20]	Human *Homo sapiens*	Activity	BMR	-0.324	0.111
[20]	Human *Homo sapiens*	Activity	BMR	-0.056	0.123
[22]	Ouachita Dusky Salamander *Desmognathus brimleyorum*	Exploration	SMR	-0.150	0.160
[22]	Ouachita Dusky Salamander *Desmognathus brimleyorum*	Feeding rate	SMR	-0.170	0.160
[22]	Ouachita Dusky Salamander *Desmognathus brimleyorum*	Exploration	SMR	-0.170	0.160
[22]	Ouachita Dusky Salamander *Desmognathus brimleyorum*	Feeding rate	SMR	-0.150	0.160
[23]	Western Trilling Cricket *Gryllus integer*	Exploration	RMR	***0.079***	0.083
[25]*	Yellow Mealworm Beetle *Tenebrio molitor*	Exploration	RMR	-0.016	0.068

[25]*	Yellow Mealworm Beetle *Tenebrio molitor*	Exploration	RMR	0.178	0.065

* Data re-analyzed

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