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SUPPLEMENTARY ONLINE MATERIAL FOR

Juvenile-only clusters and behaviour of the Early Cretaceous dinosaur *Psittacosaurus*

Qi Zhao, Michael J. Benton, Xing Xu, and P. Martin Sander

Published in *Acta Palaeontologica Polonica* 2014 59 (4): 827–833.
http://dx.doi.org/10.4202/app.2012.0128

Statistical analysis of the correlation between skull length and age in *Psittacosaurus lujiatunensis*

Specimen number	Age (yrs)	Skull length (mm)	Femur length
IVPP V16902.6	1	39	34
IVPP V14341.1	3	90	73
IVPP V14341.2	2	58	53
IVPP V14341.3	2	66	55
IVPP V14341.4	2	70	61
IVPP V14341.5	2	74	65
IVPP V14748	5	103	107
IVPP V14749	6	123	113
IVPP V12716	9	173	160
ZMN M8137	9	190	189
ZMN M8138	11	205	202
PKUVP V1053	7	117	149
PKUVP V1054	8	166	164

These data are used in Figure 3. The data were tested for normality by a Q-Q plot (below) showing the age, skull length and femur length. The correlation coefficient between age and skull length is 0.9798806; Pearson's product-moment correlation, t=16.2833. df=11, p-value=4.789e-09. These mean there is a strong positive linear relationship. Further, there is strong evidence against the null hypothesis of zero correlation in the population (p = 4.789e-09). The 95 percent confidence interval (0.9321781, 0.9941335) is also very narrow.

Residuals:

Min	1Q	Median	3Q	Max
-25.4827	-5.6754	-0.5285	7.7559	15.9944

Coefficients:

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	32.153	5.900	5.45	0.000201 ***
Age	15.761	0.968	16.28	4.79e-09 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 11.36 on 11 degrees of freedom
Multiple R-squared: 0.9602, adjusted R-squared: 0.9565
F-statistic: 265.1 on 1 and 11 DF, p-value: 4.789e-09

The correlation coefficient between femur and skull length is 0.9778729; Pearson's product-moment correlation, t=15.5031. df=11, p-value=8.049e-09. These mean there is a strong positive linear relationship. Further, there is strong evidence against the null hypothesis of zero correlation in the population (p = 8.049e-09). The 95 percent confidence interval (0.9255890, 0. 9935434) is also very narrow.

Residuals:

Min	1Q	Median	3Q	Max
-32.959	-2.810	2.112	5.824	12.826

Coefficients:

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	11.5920	7.3495	1.577	0.143
Femur	0.9286	0.0599	15.503	8.05e-09 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 11.91 on 11 degrees of freedom
Multiple R-squared: 0.9562, Adjusted R-squared: 0.9523
F-statistic: 240.3 on 1 and 11 DF, p-value: 8.049e-09