

CORRECTION

## Correction: The " $\chi$ " of the Matter: Testing the Relationship between Paleoenvironments and Three Theropod Clades

The PLOS ONE Staff

Due to a typesetting error, the headings in Tables  $\underline{1}$ – $\underline{9}$  appear incorrectly. The publisher apologizes for the errors. Please see the corrected tables here.

Table 1. Different datasets of occurrences.

Taxon or Period	Taphonomic	Datas	set I	Data	set II	Data	set III	Dataset IV		
	Category or Epoch	С	Т	С	Т	С	Т	С	Т	
Abeli. (72)	1	1	26	1	12	1	24	1	11	
	2	2	37	2	13	1	29	1	8	
	Not specified	0	0	0	0	0	0	0	0	
Carch. (66)	1	0	15	0	11	0	15	0	10	
	2	9	41	6	20	5	27	5	13	
	Not specified	1	0	1	0	0	0	0	0	
Spino. (82)	1	6	12	3	10	5	10	3	8	
	2	8	52	7	20	4	32	4	13	
	Not specified	2	1	1	1	0	0	0	0	
Cretaceous (194)	Early	14	77	9	34	10	54	8	27	
	Late	8	88	4	36	3	74	3	28	

C and T refer to the costal and terrestrial paleoenvironmental categories, respectively, while taxa are indicated by Abeli. (Abelisauridae), Carch. (Carcharodontosauridae), and Spino. (Spinosauridae). On the other hand, taphonomic categories are indicated by their respective numbers except for those occurrences lacking data about the nature of their fossil record, whose taphonomic categories were considered as not specified. Within brackets is the total number of occurrences of each taxon or period.

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Table 2. Results of Chi-square Test 1 as presented by software R.

Test 1	Dataset I	Dataset I		Dataset III Dataset III			Dataset IV	
	С	T	С	T	С	Т	С	Т
Abeli.	-	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Carch.	+	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Spino.	+	n/a	n/a	n/a	n/a	n/a	n/a	n/a
χ <sup>2</sup>	8.7586	0.7283	4.5714	0.8276	4.625	1.7664	2.7143	0.381
p-value	0.01253*	0.6948	0.1017	0.6611	0.09901	0.4135	0.2894 <sup>‡</sup>	0.8266

C and T refer to the coastal and terrestrial paleoenvironmental categories, respectively, while taxa are indicated by Abeli. (Abelisauridae), Carch. (Carcharodontosauridae), and Spino. (Spinosauridae). Positive, negative or lack of any association are signalized by +, -, and n/a, respectively. For the residual analysis values that indicate the type of association see S1 File.

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Table 3. Results of Chi-square Test 2 as presented by software R.

Test 2	Dataset	Dataset I		Dataset II		t III Dataset		:IV	
	С	T	С	т	С	T	С	Т	
Abeli.	-	+	n/a	n/a	n/a	n/a	n/a	n/a	
Carch.	+	-	n/a	n/a	n/a	n/a	n/a	n/a	
Spino.	+	-	n/a	n/a	n/a	n/a	n/a	n/a	
χ <sup>2</sup>	7.3431		2.6081		5.5498		1.9352		
p-value	0.02544	<b>!</b> *	0.2714		0.07246	5 <sup>‡</sup>	0.4308 <sup>‡</sup>	:	

C and T refer to the coastal and terrestrial paleoenvironmental categories, respectively, while taxa are indicated by Abeli. (Abelisauridae), Carch. (Carcharodontosauridae), and Spino. (Spinosauridae). Positive, negative or lack of any association are signalized by +, -, and n/a, respectively. For the residual analysis values that indicate the type of association see **S1 File**.

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Table 4. Results of Chi-square Test 3 as presented by software R.

Test 3	Dataset I	Dataset I			Dataset III		Dataset IV		
	С	Т	С	T	С	Т	С	Т	
Abeli. 1	-	-	-	n/a	n/a	+	n/a	n/a	
Abeli. 2	-	+	-	n/a	n/a	+	n/a	n/a	
Carch. 1	-	-	-	n/a	n/a	-	n/a	n/a	
Carch. 2	+	+	+	n/a	n/a	+	n/a	n/a	
Spino. 1	+	-	-	n/a	n/a	-	n/a	n/a	
Spino. 2	+	+	+	n/a	n/a	+	n/a	n/a	
$\chi^2$	16.9231	39.918	12.2632	7.0698	9.5	16.0657	8.2857	2.4286	
p-value	0.0065* <sup>‡</sup>	1.55E-07*	0.03698*‡	0.2155	0.09845 <sup>‡</sup>	0.006659*	0.1554 <sup>‡</sup>	0.7872	

C and T refer to the coastal and terrestrial paleoenvironmental categories, respectively, while taxa are indicated by Abeli. (Abelisauridae), Carch. (Carcharodontosauridae), and Spino. (Spinosauridae). Numbers after the taxa represent the taphonomic categories. Positive, negative or lack of any association are signalized by +, -, and n/a, respectively. For the residual analysis values that indicate the type of association see **S1 File**.

doi:10.1371/journal.pone.0152634.t004

<sup>\*</sup> Significant p-value.

<sup>&</sup>lt;sup>‡</sup> p-value obtained in Chi-square test using the Monte Carlo analysis.

<sup>\*</sup> Significant p-value.

<sup>&</sup>lt;sup>‡</sup> p-value obtained in Chi-square test using the Monte Carlo analysis.



Table 5. Results of Chi-square Test 4 as presented by software R.

Test 4	Dataset I		Dataset	Dataset II		Dataset III		Dataset IV	
	С	т	С	т	С	т	С	Т	
Abeli. 1	-	+	n/a	n/a	-	+	n/a	n/a	
Abeli. 2	-	+	n/a	n/a	-	+	n/a	n/a	
Carch. 1	-	+	n/a	n/a	-	+	n/a	n/a	
Carch. 2	+	-	n/a	n/a	+	-	n/a	n/a	
Spino. 1	+	-	n/a	n/a	+	-	n/a	n/a	
Spino. 2	+	-	n/a	n/a	+	-	n/a	n/a	
$\chi^2$	14.613	37	5.3791		13.802	29	5.3592		
p-value	0.0124	19* <sup>‡</sup>	0.3923 <sup>‡</sup>		0.0154	19* <sup>‡</sup>	0.3758 <sup>‡</sup>		

C and T refer to the coastal and terrestrial paleoenvironmental categories, respectively, while taxa are indicated by Abeli. (Abelisauridae), Carch. (Carcharodontosauridae), and Spino. (Spinosauridae). Numbers after the taxa represent the taphonomic categories. Positive, negative or lack of any association are signalized by +, -, and n/a, respectively. For the residual analysis values that indicate the type of association see **S1 File**.

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Table 6. Results of Chi-square Test 5 as presented by software R.

Test 5	Dataset	Dataset I		Dataset II		Dataset III		Dataset IV	
	С	Т	С	т	С	т	С	т	
Abeli. 1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Abeli. 2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
χ <sup>2</sup>	0.0746		0.2317		0.0173		0.0461		
p-value	1 <sup>‡</sup>		1 <sup>‡</sup>		1 <sup>‡</sup>		1 <sup>‡</sup>		
Fischer's	0.71509	)	0.55326	3	1.2041	6	0.73856	3	
p-value	0.8003		0.8611		0.7071		0.8286		

C and T refer to the coastal and terrestrial paleoenvironmental categories, respectively. Numbers after Abeli. (Abelisauridae) represent the taphonomic categories. Positive, negative or lack of any association are signalized by +, -, and n/a, respectively. For the residual analysis values that indicate the type of association see **S1 File**.

doi:10.1371/journal.pone.0152634.t006

<sup>\*</sup> Significant p-value.

<sup>&</sup>lt;sup>‡</sup> p-value obtained in Chi-square test using the Monte Carlo analysis.

<sup>&</sup>lt;sup>‡</sup> p-value obtained in Chi-square test using the Monte Carlo analysis.

Table 7. Results of Chi-square Test 6 as presented by software R.

Test 6	Dataset I		Dataset III Dataset III		et III	Dataset IV		
	С	Т	С	т	С	Т	С	Т
Carch. 1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Carch. 2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
$\chi^2$	3.1339		3.0298		2.6228		3.3816	
p-value	0.1054 <sup>‡</sup>		0.1669 <sup>‡</sup>	:	0.1599	‡	0.1329 <sup>‡</sup>	‡
Fischer's	0		0		0		0	
p-value	0.1033		0.1505		0.1617		0.1282	

C and T refer to the coastal and terrestrial paleoenvironmental categories, respectively. Numbers after Carch. (Carcharodontosauridae) represent the taphonomic categories. Positive, negative or lack of any association are signalized by +, -, and n/a, respectively. For the residual analysis values that indicate the type of association see **S1 File**.

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Table 8. Results of Chi-square Test 7 as presented by software R.

Test 7	Dataset I		Dataset II		Dataset III		Dataset IV	
	С	т	С	т	С	Т	С	Т
Spino. 1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Spino. 2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
$\chi^2$	3.7607		0.038		3.5979		0.0499	
p-value	0.08196	) <sup>‡</sup>	0.8455 <sup>‡</sup>	:	0.0964	5 <sup>‡</sup>	1 <sup>‡</sup>	
Fischer's	3.19102	2	0.86042	2	3.8733		1.21006	;
p-value	0.07777	,	0.5857		0.1022		0.7505	

C and T refer to the coastal and terrestrial paleoenvironmental categories, respectively. Numbers after Spino. (Spinosauridae) represent the taphonomic categories. Positive, negative or lack of any association are signalized by +, -, and n/a, respectively. For the residual analysis values that indicate the type of association see **S1 File**.

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Table 9. Results of Chi-square Test 8 as presented by software R.

Test 8	Datase	Dataset I		Dataset II		Dataset III		Dataset IV	
	С	т	С	Т	С	Т	С	Т	
Early Cretaceous	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Late Cretaceous	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
$\chi^2$	2.2376		5.7445	5	1.8742		2.056		
p-value	0.1347		0.0165	54*	0.171		0.1516		
Fischer's	1.9926	8	4.5209	)1	2.3582	2	2.7247	9	
p-value	0.1739		0.0203	81*	0.231		0.1955		

C and T refer to the coastal and terrestrial paleoenvironmental categories, respectively. Positive, negative or lack of any association are signalized by +, -, and n/a, respectively. For the residual analysis values that indicate the type of association see **S1 File**.

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<sup>&</sup>lt;sup>‡</sup> p-value obtained in Chi-square test using the Monte Carlo analysis.

<sup>&</sup>lt;sup>‡</sup> p-value obtained in Chi-square test using the Monte Carlo analysis.

<sup>\*</sup> Significant p-value.



## Reference

 Sales MAF, Lacerda MB, Horn BLD, de Oliveira IAP, Schultz CL (2016) The "χ" of the Matter: Testing the Relationship between Paleoenvironments and Three Theropod Clades. PLoS ONE 11(2): e0147031. doi:10.1371/journal.pone.0147031 PMID: 26829315