

Effects of Enclosure and Environmental Enrichment on the Behaviour of Ring-Tailed Lemurs (*Lemur catta*)

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Results of the Full-Null Model Comparison

Table S1. Model 1: Full-null model comparison for Affiliation.

null.model: Affiliation ~ 1 + (1/ animal) + (1/ enrichmentID) + (1/ date)								
full.model: Affiliation ~ enrichment × location + (1/animal) + (1/ enrichmentID) + (1/date)								
	npar	AIC	BIC	logLik	deviance	Chisq	Df	Pr(>Chisq)
null.model	4	1166.3	1183.2	−579.18	1158.3			
full.model	7	1101.5	1131	−543.74	1087.5	70.882	3	<0.001

Table S2. Model 2: Full-null model comparison for Enrichment

null.model: Enrichment ~ 1 + (1/animal) + (1/enrichmentID) + (1/date)								
full.model: Enrichment ~ enrichment × location + (1/animal) + (1/enrichmentID) + (1/date)								
	npar	AIC	BIC	logLik	deviance	Chisq	Df	Pr(>Chisq)
null.model	4	1074.5	1091.4	−533.26	1066.5			
full.model	7	1048	1077.5	−517.01	1034	32.494	3	<0.001

Table S3. Model 3: Full-null model comparison for Locomotion.

null.model: Locomotion ~ 1 + (1/animal) + (1/enrichmentID) + (1/date)								
full.model: Locomotion ~ enrichment × location + (1/animal) + (1/enrichmentID) + (1/date)								
	npar	AIC	BIC	logLik	deviance	Chisq	Df	Pr(>Chisq)
null.model	4	2024.7	2041.6	−1008.36	2016.7			
full.model	7	1897.6	1927.1	−941.82	1883.6	133.09	3	<0.001

Table S4. Model 4: Full-null model comparison for Resting.

null.model: Resting ~ 1 + (1/animal) + (1/enrichmentID) + (1/date)								
full.model: Resting ~ enrichment × location + (1/animal) + (1/enrichmentID) + (1/date)								
	npar	AIC	BIC	logLik	deviance	Chisq	Df	Pr(>Chisq)
null.model	4	2618.2	2635.1	−1305.1	2610.2			
full.model	7	2484.8	2514.3	−1235.4	2470.8	139.48	3	< 0.001

Figure S5. Model 5: Full-null model comparison for Self-directed behaviours.

null.model: Self-directed ~ 1 + (1/animal) + (1/enrichmentID) + (1/date)								
full.model: Self-directed ~ enrichment × location + (1/animal) + (1/enrichmentID) + (1/date)								
	npar	AIC	BIC	logLik	deviance	Chisq	Df	Pr(>Chisq)
null.model	4	1362.9	1379.7	−677.43	1354.9			
full.model	7	1344.9	1374.4	−665.47	1330.9	23.922	3	<0.001

Figure S6. Model 6: Full-null model comparison for Species-specific behaviours.

null.model: Species-specific ~ 1 + (1/animal) + (1/enrichmentID) + (1/date)								
full.model: Species-specific ~ enrichment × location + (1/animal) + (1/enrichmentID) + (1/date)								
	npar	AIC	BIC	logLik	deviance	Chisq	Df	Pr(>Chisq)
null.model	4	962.1	978.95	−477.05	954.1			
full.model	7	870	899.5	−428	856	98.1	3	<0.001