Supplementary material

This supplement includes detailed summary statistical results of mixed linear models examining camp size dynamics over time and space.

1. Mixed Effects Model: Features (F) versus occupants (N), Group (G), and Habitat (H)

Method

Variance estimation	Restricted maximum likelihood
DF for fixed effects	Kenward-Roger
Rows unused	67

Factor Information

Factor	Type	Levels	Values
Group	Random	10	Aborigines, Ache, Alyawara, Efe, Hadza, Hill Pandaram, Kua, Kung, Nukak, Nunamuit
Habitat	Fixed	3	Arctic, Arid, Forest

Variance Components

Source	Var	% of Total	SE Var	Z-Value	P-Value
Group	0.092712	35.19%	0.058802	1.576673	0.057
Error	0.170764	64.81%	0.017862	9.560291	0.000
Total	0.263476				

-2 Log likelihood = 244.936531

Tests of Fixed Effects

Term	DF Num	DF Den	F-Value	P-Value
N	1.00	188.60	245.82	0.000
Habitat	2.00	30.56	0.57	0.571
N*Habitat	2.00	186.58	0.14	0.871

Model Summary

S	R-sq	R-sq(adj)
0.413237	73.93%	73.25%

Coefficients

Term	Coef	SE Coef	DF	T-Value	P-Value
Constant	-1.013984	0.201460	29.81	-5.033173	0.000
N	0.839671	0.053555	188.60	15.678740	0.000
Habitat					
Arctic	-0.221535	0.314418	21.40	-0.704588	0.489
Arid	0.256517	0.245285	30.90	1.045793	0.304
N*Habitat					
Arctic	0.004400	0.074651	189.44	0.058944	0.953
Arid	-0.034270	0.066188	183.33	-0.517766	0.605

Marginal Fitted Equation

Habitat			
Arctic	F	=	-1.236 + 0.844 N
Arid	F	=	-0.757 + 0.805 N
Forest	F	=	-1.049 + 0.8695 N

2. Mixed Effects Model: Camp area (A) versus occupants (N), Group (G), and Habitat (H)

Method

Variance estimation	Restricted maximum likelihood
DF for fixed effects	Kenward-Roger
Rows unused	75

Factor Information

Factor	Type	Levels	Values
Group	Random	9	Aborigines, Ache, Aka, Alyawara, Efe, Hadza, Kua, Kung, Nukak
Habitat	Fixed	2	Arid, Forest

Variance Components

Source	Var	% of Total	SE Var	Z-Value	P-Value
Group	1.392953	63.11%	1.100432	1.265824	0.103
N*Group	0.183480	8.31%	0.133782	1.371486	0.085
Error	0.630834	28.58%	0.068278	9.239128	0.000
Total	2.207267				

-2 Log likelihood = 488.666261

Tests of Fixed Effects

Term	DF Num	DF Den	F-Value	P-Value
N	1.00	16.76	31.58	0.000
Habitat	1.00	16.10	0.22	0.644
N*Habitat	1.00	16.76	1.39	0.255

Model Summary

S	R-sq	R-sq(adj)
0.794250	88.25%	88.06%

Coefficients

Term	Coef	SE Coef	DF	T-Value	P-Value
Constant	1.768743	0.685841	16.10	2.578939	0.020
N	1.316941	0.234332	16.76	5.619990	0.000
Habitat					
Arid	0.322923	0.685841	16.10	0.470842	0.644
N*Habitat					

Arid	0.276058	0.234332	16.76	1.178064	0.255

Marginal Fitted Equation

Habitat			
Arid	A	=	2.09 + 1.593 N
Forest	A	=	1.446 + 1.04088 N

3. Mixed Effects Model: Occupants (N) versus residence time (T), Group (G), and Habitat (H)

Method

Variance estimation	Restricted maximum likelihood
DF for fixed effects	Kenward-Roger
Rows unused	102

Factor Information

Factor	Type	Levels	Values
Group	Random	8	Aborigines, Ache, Aka, Efe, Kua, Kung, Nukak, Nunamuit
Habitat	Fixed	3	Arctic, Arid, Forest

Variance Components

Source	Var	% of Total	SE Var	Z-Value	P-Value
Group	0.003981	1.89%	0.016581	0.240093	0.405
T*Group	0.009721	4.62%	0.009677	1.004535	0.158
Error	0.196534	93.48%	0.022996	8.546283	0.000
Total	0.210236				

-2 Log likelihood = 222.673750

Tests of Fixed Effects

Term	DF Num	DF Den	F-Value	P-Value
T	1.00	14.58	6.47	0.023

Habitat	2.00	7.83	12.92	0.003
T*Habitat	2.00	8.09	4.34	0.053

Model Summary

S	R-sq	R-sq(adj)
0.443322	26.84%	24.48%

Coefficients

Term	Coef	SE Coef	DF	T-Value	P-Value
Constant	2.472767	0.119359	28.80	20.717012	0.000
T	0.182395	0.071708	14.58	2.543579	0.023
Habitat					
Arctic	-0.590607	0.220979	48.32	-2.672685	0.010
Arid	-0.051210	0.135463	16.92	-0.378040	0.710
T*Habitat					
Arctic	0.219206	0.128677	20.54	1.703531	0.104
Arid	0.026349	0.083284	10.13	0.316379	0.758

Marginal Fitted Equation

Habitat			
Arctic	N	=	1.882 + 0.402 T
Arid	N	=	2.422 + 0.209 T
Forest	N	=	3.115 - 0.06316 T

4. Mixed Effects Model: Camp area (A) versus residence time (T), Group (G), and Habitat (H)

Method

Variance estimation	Restricted maximum likelihood
DF for fixed effects	Kenward-Roger

Rows unused	122

Factor Information

Factor	Type	Levels	Values
Group	Random	7	Aborigines, Ache, Aka, Efe, Kua, Kung, Nukak
Habitat	Fixed	2	Arid, Forest

Variance Components

Source	Var	% of Total	SE Var	Z-Value	P-Value
Group	3.345883	89.82%	2.145506	1.559484	0.059
T*Group	0.000000	0.00%	*	*	*
Error	0.379414	10.18%	0.046694	8.125592	0.000
Total	3.725296				

-2 Log likelihood = 299.439862

Tests of Fixed Effects

Term	DF Num	DF Den	F-Value	P-Value
T	1.00	136.91	33.01	0.000
Habitat	1.00	5.31	0.99	0.363
T*Habitat	1.00	136.91	11.68	0.001

Model Summary

S	R-sq	R-sq(adj)
0.615966	86.19%	85.89%

Coefficients

Term	Coef	SE Coef	DF	T-Value	P-Value
Constant	4.929546	0.715085	5.31	6.893647	0.001
T	0.373679	0.065035	136.91	5.745821	0.000
Habitat					
Arid	0.711454	0.715085	5.31	0.994921	0.363
T*Habitat					

Arid	0.222278	0.065035	136.91	3.417831	0.001

Marginal Fitted Equation

Habitat			
Arid	A	=	5.64 + 0.596 T
Forest	A	=	4.21809 + 0.1514 T

5. Mixed Effects Model: Camp area (A) versus occupants (N), residence time (T), Group (G), and Habitat (H)

Method

Variance estimation	Restricted maximum likelihood
DF for fixed effects	Kenward-Roger
Rows unused	123

Factor Information

Factor	Type	Levels	Values
Group	Random	7	Aborigines, Ache, Aka, Efe, Kua, Kung, Nukak
Habitat	Fixed	2	Arid, Forest

Variance Components

Source	Var	% of Total	SE Var	Z-Value	P-Value
Group	3.272029	93.22%	2.093222	1.563155	0.059
Error	0.237909	6.78%	0.029622	8.031578	0.000
Total	3.509938				

-2 Log likelihood = 239.709884

Tests of Fixed Effects

Term	DF Num	DF Den	F-Value	P-Value
N	1.00	129.38	74.49	0.000
T	1.00	132.97	31.63	0.000

Habitat	1.00	7.22	2.57	0.152
N*Habitat	1.00	129.38	1.26	0.263
T*Habitat	1.00	132.97	12.05	0.001

Model Summary

S	R-sq	R-sq(adj)
0.487759	91.51%	91.20%

Coefficients

Term	Coef	SE Coef	DF	T-Value	P-Value
Constant	2.419340	0.762039	7.22	3.174826	0.015
N	0.919590	0.106546	129.38	8.630960	0.000
T	0.295116	0.052477	132.97	5.623746	0.000
Habitat					
Arid	1.221492	0.762039	7.22	1.602926	0.152
N*Habitat					
Arid	-0.119814	0.106546	129.38	-1.124533	0.263
T*Habitat					
Arid	0.182135	0.052477	132.97	3.470772	0.001

Marginal Fitted Equation

Habitat			
Arid	A	=	3.64 + 0.800 N + 0.477 T
Forest	A	=	1.198 + 1.03940 N + 0.112981 T