

Supplementary Materials

Lower risk of male infanticide in multilevel primate societies

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Supplementary Table S1. Infant mortality from male infanticide and female counterstrategies form 26 species of 38 populations that used in comparative analysis.

<i>Species</i>	Mating system	Infant mortality due to male infanticide	Mortality of related infant that involved male takeover (%)	Reference infant mortality from male infanticide	Female coalitions ?	Reference for female coalitions	Female secondary dispersal?	Reference for female secondary dispersal	Extra-group paternity	Reference for EGP	Counterstrategies number
<i>Rhinopithecus_roxellana</i>	Multilevel	4.96%	17.65%	This study	Present	This study	Yes	This study	6.25%	This study	3
<i>Rhinopithecus_roxellana</i>	Multilevel	1.43%	10.00%	1, 2	Present	1	Yes	49	57.10%	70	3
<i>Rhinopithecus_bieti</i>	Multilevel	2.38%	10.00%	Li DY. unpublished data	Present	44	Yes	unpublished data	NA	NA	2
<i>Papio_hamadryas</i>	Multilevel	2.06%	16.67%	3	Present	45	Yes	50	NA		2
<i>Theropithecus_gelada*</i>	Multilevel	6.67%	30.77%	4	Present	45	No	51	19%	71	2
<i>Erythrocebus_patas</i>	Multimale	1.35%	NA	5	Present	45	No	52	33%	72	2
<i>Papio_cynocephalus</i>	Multimale	0.31%	NA	6	Present	45	No	53	0%	73	1
<i>Propithecus_diadema</i>	Multimale	10.71%	85.71%	7	Present	45	Yes	54	0%	74	2
<i>Propithecus_verreauxi</i>	Multimale	25.00%	100.00%	8	Present	45	No	55	2%	75	2
<i>Alouatta_caraya</i>	Multimale	20.93%	80.00%	9	Absent	45	No	56	0%	76	0
<i>Alouatta_palliata</i>	Multimale	13.64%	46.15%	10, 11	Absent	45	No	57	NA		0
<i>Cebus_apella</i>	Multimale	14.42%	41.67%	12	Absent	45	Yes	58	0%	77	1
<i>Cebus_capucinus</i>	Multimale	16.09%	70.00%	13, 18	Absent	45	Yes	59	0%	78	1
<i>Semnopithecus_entellus</i>	Multimale	15.38%	21.62%	14	Absent	45	No	60	14.30%	79	1
<i>Gorilla_beringei</i>	Multimale	3.52%	6.00%	15	Present	45	Yes	61	0%	79	2
<i>Pan_troglodytes</i>	Multimale	10.96%	NA	16	Present	45	Yes	17	7.10%	79	3
<i>Pan_troglodytes</i>	Multimale	1.94%	NA	17	Present	45	Yes	17	7.10%	79	3
<i>Cercocebus_atys</i>	Multimale	14.29%	14.29%	19	Present	45	No	62	NA		1
<i>Macaca_fuscata</i>	Multimale	20.00%	28.57%	20	Present	45	No	20	33%	79	2
<i>Papio_ursinus</i>	Multimale	28.57%	26.09%	21, 22	Present	45	No	63	0%	80	1
<i>Papio_ursinus</i>	Multimale	8.11%	40.00%	23, 24	Present	45	No	63	0%	80	1
<i>Papio_ursinus</i>	Multimale	13.79%	21.05%	23	Present	45	No	63	0%	80	1

<i>Papio_ursinus</i>	Multimale	15.63%	41.67%	D. Gaynor Person. Commun	Present	45	No	63	0%	80	1
<i>Alouatta_caraya</i>	Unimale	47.00%	NA	25	Absent	45	No	56	0%	81	0
<i>Alouatta_caraya</i>	Unimale	20.93%	83.33%	9	Absent	45	No	56	0%	81	0
<i>Alouatta_caraya</i>	Unimale	7.96%	100.00%	26	Absent	45	No	56	0%	81	0
<i>Alouatta_seniculus</i>	Unimale	9.24%	59.09%	27, 28	Absent	45	No	64	0%	82	0
<i>Colobus_vellerosus</i>	Unimale	38.46%	55.56%	29	Present	46	Yes	65	NA		2
<i>Presbytis_thomasi</i>	Unimale	15.00%	NA	30, 31	Present	47	Yes	66	NA		2
<i>Semnopithecus_entellus</i>	Unimale	37.93%	37.93%	32, 33	Present	45	No	60	10.30%	83	2
<i>Semnopithecus_entellus</i>	Unimale	20.00%	50.00%	34	Present	45	No	60	10.30%	83	2
<i>Trachypithecus_leucocephalus</i>	Unimale	17.74%	100.00%	35	Present	48	NA		5%	84	2
<i>Cercopithecus_mitis</i>	Unimale	16.98%	18.75%	36, 37	Present	45	No	67	39%	85	2
<i>Cercopithecus_mitis</i>	Unimale	26.92%	NA	38	Present	45	No	67	39%	85	2
<i>Hylobates_lar</i>	Unimale	9.09%	100.00%	39	Absent	45	No	68	7.10%	86	1
<i>Gorilla_beringei</i>	Unimale	8.28%	57.14%	40	Present	45	Yes	61	0%	79	2
<i>Alouatta_seniculus</i>	Unimale	9.24%	59.09%	41, 42	Absent	45	No	64	0%	82	0
<i>Ptilocobus_rufomitratus</i>	Unimale	25.00%	100.00%	43	Absent	43	Yes	69	NA		1

* Ten infants who involved male takeover were excluded from analysis because Beehner & Bergman (2008) considered that the older infants were less risk of infanticide. We still included ten infants for the analysis for two reasons. One is that during our analysis, we had considered all unweaned infants involved male takeover events were at risk of infanticide and not taken infant age into account. The other is that gelada baboons (*Theropithecus gelada*) do not show any seasonality of birth, infanticide can shorten lactational amenorrhea, and the victims' mothers can conceive within one month after infanticide (Miller et al. 2021).

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