Table S1. Pearson correlation coefficients between binarized sources of early life adversity[a]

r (adj. p: Holm's method)	Maternal Loss (Mom)	Maternal Loss (Offsp)	Low Maternal Rank (Mom)	Low Maternal Rank (Offsp)	Drought (Mom)	Drought (Offsp)	Large Group (Mom)	Large Group (Offsp)	Close-in-age Sibling (Mom)
Maternal Loss (Mom)	---								
Maternal Loss (Offsp)	0.12[b] 0.07[d]	---							
Low Maternal Rank (Mom)	-0.07 1.00	0.07 1.00	---						
Low Maternal Rank (Offsp)	0.07 1.00	0.06 1.00	**0.40** **<0.0001**	---					
Drought (Mom)	0.06 1.00	0.06 1.00	-0.02 1.00	0.04 1.00	---				
Drought (Offsp)	0.01 1.00	0.05 1.00	-0.02 1.00	0.04 1.00	-0.06 1.00	---			
Large Group (Mom)	0.13 **0.01**	0.09 0.58	-0.07 1.00	0.06 1.00	-0.02 1.00	-0.06 1.00	---		
Large Group (Offsp)	-0.06 1.00	0.01 1.00	-0.12 0.041	-0.02 1.00	-0.10 0.27	0.17 **0.0001**	0.03 1.00	---	
Close-in-Age Sibling (Mom)	-0.08 0.89	0.05 1.00	0.09 0.37	-0.17 **0.0003**	-0.11 0.075	0.03 1.00	-0.12 0.06	0.08 1.00	---

[a]Correlations are calculated for binary measures of adversity within and between generations

[b]Pearson's correlation coefficient (r), reported for each pair of variables. Coefficients > 0.2 appear in bold

[c]p-value for r, reported for each pair of variables

[d]p-value following Holm's method for correcting for multiple testing

Table S2. Full mixed effects Cox proportional hazards model:

Generation	Parameter	Coefficient[a]	Hazard Ratio (95% CI)	p value	Interpretation
Maternal	Maternal Loss	0.39	1.47 (1.12-1.95)	**0.006**	Offspring survived less well if their mother experienced maternal loss during her early life.
	Close-In-Age Younger Sibling	0.33	1.39 (1.03-1.89)	**0.03**	Offspring survived less well if their mother had a close-in-age younger sibling during her early life.
	Low Maternal Rank	0.22	1.25 (0.89-1.76)	0.19	
	Drought	0.14	1.15 (0.77-1.71)	0.50	
	High Social Density	-0.12	0.89 (0.52-1.51)	0.66	
Offspring	Maternal Loss	0.67	1.95 (1.51-2.54)	**$5x10^{-7}$**	Offspring survived less well if their mother died within four years of their birth.
	Low Maternal Rank	0.35	1.43 (1.05-1.94)	**0.03**	Offspring survived less if well if they were born to a low-ranking mother.
	Drought	-0.29	0.75 (0.52-1.08)	0.12	
	High Social Density	-0.07	0.93 (0.71-1.22)	0.61	

[a]In all cases, positive coefficients indicate a higher hazard ratio in the presence of the adverse condition

Table S3. Full mixed effects model of proportion time spent carrying offspring

Parameter	Coefficient	Standard Error	p value	Interpretation
Intercept	0.955	0.028		
Offspring Age (Weeks)	-0.034	0.0007	**<0.0001**	Proportion of time that a mother carries her infant declines in a quadratic fashion as infant age increases (concave up).
Offspring Age (Weeks) Squared	0.0003	0.00001	**<0.0001**	
Season (Wet)	0.030	0.006	**<0.0001**	Proportion of time that a mother carries her infant is higher in the wet season.
Number of Adult Females	0.0008	0.0009	0.39	
Maternal Viability	0.018	0.013	0.16	
Maternal Age (Years)	0.0003	0.001	0.82	
Mother is Low Ranking	0.011	0.013	0.42	
Mother Experienced Maternal Loss	0.009	0.015	0.56	
Mother Experienced Close-In-Age Younger Sibling	0.012	0.016	0.43	

Table S4. Reduced mixed effects model of proportion time spent carrying offspring

Parameter	Coefficient	Standard Error	p value	Interpretation
Intercept	0.982	0.028		
Offspring Age (Weeks)	-0.034	0.0007	**<0.0001**	Proportion of time that a mother carries her infant declines in a quadratic fashion as infant age increases (concave up).
Offspring Age (Weeks) Squared	0.0003	0.00001	**<0.0001**	
Season (Wet)	0.031	0.006	**<0.0001**	Proportion of time that a mother carries her infant is higher in the wet season.

Table S5. Full mixed effects model of proportion time spent nursing offspring

Parameter	**Coefficient**	**Standard Error**	**p value**	**Interpretation**
Intercept	0.875	0.025		
Offspring Age (Weeks)	-0.039	0.0007	**<0.0001**	Proportion of time that a mother nurses her infant declines in a quadratic fashion as infant age increases (concave up).
Offspring Age (Weeks) Squared	0.0005	0.00001	**<0.0001**	
Season (Wet)	0.013	0.006	**0.03**	Proportion of time that a mother nurses her infant is higher in the wet season.
Number of Adult Females	-0.001	0.0009	0.19	
Maternal Viability	0.018	0.011	0.12	
Maternal Age (Years)	-0.0007	0.001	0.53	
Mother is Low Ranking	0.021	0.012	0.07	
Mother Experienced Maternal Loss	0.009	0.014	0.53	
Mother Experienced Close-In-Age Younger Sibling	0.006	0.014	0.66	

Table S6. Reduced mixed effects model of proportion time spent nursing offspring

Parameter	**Coefficient**	**Standard Error**	**p value**	**Interpretation**
Intercept	0.875	0.025		
Offspring Age (Weeks)	-0.039	0.0007	**<0.0001**	Proportion of time that a mother nurses her infant declines in a quadratic fashion as infant age increases (concave up).
Offspring Age (Weeks) Squared	0.0005	0.00001	**<0.0001**	
Season (Wet)	0.013	0.006	**0.03**	Proportion of time that a mother nurses her infant is higher in the wet season.

Table S7. Alternative mixed effects survival model that includes cumulative maternal adversity instead of multivariate adversity conditions (R^2=0.07, log likelihood = -1598)

Generation	Parameter	Coefficient	Hazard Ratio (95% CI)	p value	Interpretation
Maternal	Cumulative Maternal Adversity	0.27	1.31 (1.12-1.52)	**0.0007**	Offspring survived less well if their mother experienced more adversity during her early life.
Offspring	Maternal Loss	0.66	1.94 (1.50-2.52)	**$6x10^{-7}$**	Offspring survived less well if their mother died within four years of their birth.
	Low Maternal Rank	0.30	1.36 (1.03-1.78)	**0.03**	Offspring survived less if well if they were born to a low ranking mother.

Table S8. Final reduced models written out in R syntax.

Adversity Model:
Surv(Age_4, Death_4)~ML+MS+OL+OR+(1|Maternal ID)+(1|Grandmaternal ID)
Maternal Loss Model:
Surv(Age_2, Death_2)~ML+(1|Maternal ID)
Carrying Model:
prop_carrying~Age+Age^2+Season+(1|Maternal ID)
Suckling Model:
prop_suckling~Age+Age^2+Season+(1|Maternal ID)

ML: Maternal loss in the mother's generation
MS: Maternal exposure to a close-in-age younger sibling
OL: Maternal loss in the offspring's generation
OR: Low maternal rank in the offspring's generation
Age_4/Age_2: Offspring age at death/censor. Maximum age = 4 or 2 depending on analysis
Death_4/Death_2: Binary indicator of whether death occurred at the offspring's listed age. (1= death, 0 = censored)
prop_carrying/prop_suckling: Proportion of time that a mother spent carrying/nursing her infant during the focal sample
Age/Age^2: Offspring age at the time of focal sample
Season: Binary; Wet (November-May) or dry (June-October)