Supporting Information

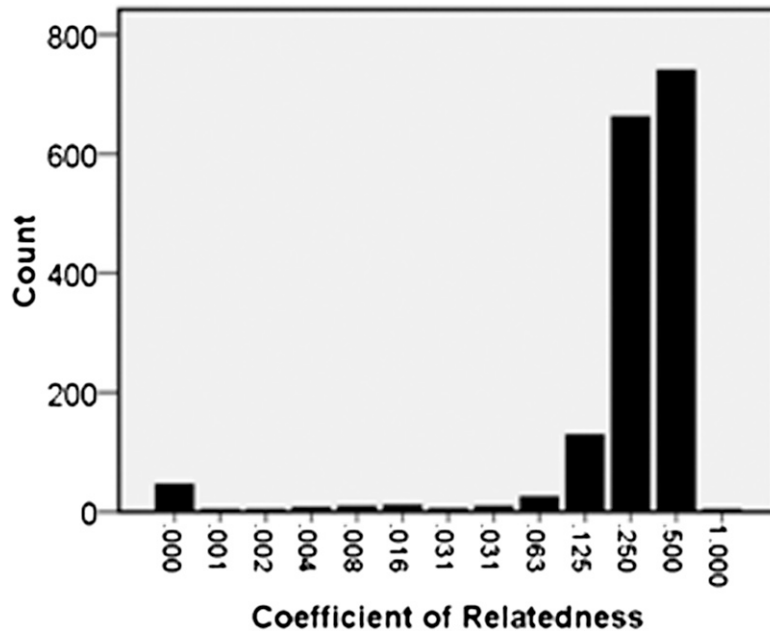## Strassmann 10.1073/pnas.1100306108

Fig. S1. The number of children by their coefficient of relatedness to their work–eat group (WEG) boss.
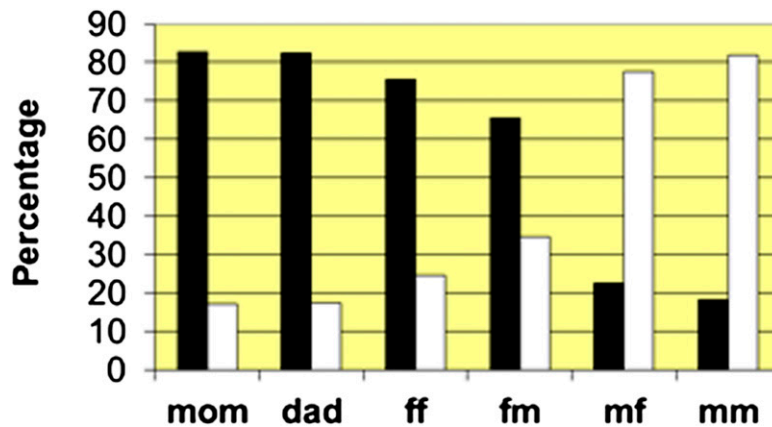

Fig. S2. The percentage of children who lived in the same village as each kind of relative (dead relatives were excluded from the analysis). Black bars represent the children that lived with the relative, and white bars represent the children that did not live with the relative. ff, father's father; fm, father's mother; mf, mother's father; mm, mother's mother.

Table S1. Predictors of death by age 5 y (*n* = 3,000 person-y and *n* = 165 deaths)

Variable	*P*	Hazard ratio	95% confidence limits
Mother*	0.0113	0.242	0.081–0.726
Father*	0.6899	1.511	0.199–11.471
Year 1[†]	0.0002	2.316	1.495–3.589
Year 2[†]	<0.0001	2.500	1.644–3.802
Male[‡]	0.0595	0.740	0.541–1.012
WEG boss			
Father's father[§]	0.9647	1.011	0.610–1.677
Mother's father[§]	0.1425	0.535	0.232–1.234
Father's brother[§]	0.5266	1.234	0.644–2.364
Father's father's brother[§]	0.1349	1.719	0.845–3.497
Unrelated[§]	0.4339	0.553	0.126–2.436
Miscellaneous[§]	0.2434	0.646	0.309–1.347
Grandparents			
Father's mother*	0.0007	1.857	1.305–2.693
Father's father*	0.0485	1.556	1.003–2.415
Mother's mother*	0.7668	0.949	0.672–1.341
Mother's father*	0.6570	1.075	0.781–1.479
Number of adults in WEG	0.5651	0.988	0.948–1.030

This model includes the number of adults in the WEG.
*Reference is dead.
[†]Reference is year 3.
[‡]Reference is female.
[§]Reference is father.

Table S2. Predictors of death by age 5 y (*n* = 2961 person-y and *n* = 163 deaths)

Variable	*P*	Hazard ratio	95% confidence limits
Mother*	0.0140	0.248	0.081–0.745
Father*	0.6965	1.495	0.198–11.258
Mother's age	0.2645	0.985	0.959–1.011
Year 1[†]	0.0002	2.350	1.504–3.671
Year 2[†]	<0.0001	2.573	1.684–3.932
Male[‡]	0.0558	0.734	0.535–1.008
WEG boss			
Father's father[§]	0.6695	0.900	0.554–1.461
Mother's father[§]	0.0783	0.460	0.194–1.092
Father's brother[§]	0.7287	1.116	0.601–2.074
Father's father's brother[§]	0.2549	1.478	0.754–2.896
Unrelated[§]	0.3367	0.478	0.106–2.155
Miscellaneous[§]	0.1680	0.594	0.284–1.245
Grandparents			
Father's mother*	0.0023	1.795	1.231–2.616
Father's father*	0.0691	1.510	0.968–2.356
Mother's mother*	0.5776	0.904	0.635–1.288
Mother's father*	0.6788	1.072	0.773–1.486
Dependency ratio[¶]	0.9290	0.984	0.685–1.412

*Reference is dead
[†]Reference is year 3.
[‡]Reference is female.
[§]Reference is father.
[¶]This model includes the dependency ratio, which is defined as the number of children age < 10 y divided by the number of married adults in the WEG.

Table S3. Predictors of death by age 5 y (*n* = 2,933 person-y and *n* = 161 deaths)

Variable	*P*	Hazard ratio	95% confidence limits
Mother*	0.0095	0.230	0.076–0.698
Father*	0.7219	1.442	0.192–10.843
Mother's age	0.3339	0.987	0.961–1.014
Year 1[†]	0.0001	2.457	1.554–3.884
Year 2[†]	<0.0001	2.745	1.772–4.252
Male[‡]	0.0990	0.763	0.553–1.052
Wealth	0.0409	1.140	1.005–1.293
Polygyny	0.0641	1.333	0.983–1.808
Village 9[§]	0.0108	0.602	0.407–0.889
WEG boss			
Father's father[¶]	0.8654	1.044	0.636–1.714
Mother's father[¶]	0.0850	0.468	0.198–1.110
Father's brother[¶]	0.3258	1.391	0.720–2.684
Father's father's brother[¶]	0.0439	1.956	1.019–3.756
Unrelated[¶]	0.5411	0.619	0.133–2.880
Miscellaneous[¶]	0.3303	0.675	0.306–1.489
Grandparents			
Father's mother*	0.0009	1.921	1.307–2.823
Father's father*	0.0583	1.551	0.985–2.444
Mother's mother*	0.7120	0.935	0.655–1.335
Mother's father*	0.6272	1.085	0.780–1.509

This model omits the interaction of polygyny and village 9.
*Reference is dead.
[†]Reference is year 3.
[‡]Reference is female.
[§]Reference is villages 1–8.
[¶]Reference is father.

Table S4. Predictors of death by age 5 y (*n* = 2,947 person-y and *n* = 161 deaths)

Variable	*P*	Hazard ratio	95% confidence limits
Mother*	0.0045	0.204	0.068–0.612
Father*	0.7286	1.429	0.190–10.733
Mother's age	0.2599	0.985	0.958–1.012
Year 1[†]	<0.0001	2.464	1.566–3.877
Year 2[†]	<0.0001	2.692	1.743–4.160
Male[‡]	0.0986	0.763	0.554–1.052
Wealth	0.0694	1.120	0.991–1.266
Mother's marital status			
Fiancé[§]	0.1914	0.502	0.179–1.411
Polygynous[§]	0.3282	1.228	0.873–1.726
Village 9[¶]	0.0115	0.607	0.412–0.894
WEG Boss			
Father's father[‖]	0.9776	0.993	0.608–1.622
Mother's father[‖]	0.3757	0.662	0.266–1.648
Father's brother[‖]	0.3858	1.338	0.693–2.586
Father's father's brother[‖]	0.0505	1.922	0.999–3.701
Unrelated[‖]	0.7313	0.768	0.171–3.456
Miscellaneous[‖]	0.4060	0.717	0.327–1.572
Grandparents			
Father's mother*	0.0013	1.870	1.278–2.736
Father's father*	0.0499	1.565	1.000–2.449
Mother's mother*	0.7181	0.937	0.659–1.333
Mother's father*	0.6420	1.081	0.778–1.503

Instead of a variable for WEG polygyny, this table includes variables for the mother's marital status: fiancé and polygynous in reference to monogamous mothers.
*Reference is dead.
[†]Reference is year 3.
[‡]Reference is female.
[§]Reference is monogamous.
[¶]Reference is villages 1–8.
[‖]Reference is father.

Table S5. Predictors of death by age 5 y (*n* = 2,762 person-y and *n* = 155 deaths)

Variable	*P*	Hazard ratio	95% confidence limits
Mother*	0.0050	0.206	0.068–0.620
Father*	0.6597	1.546	0.222–10.755
Father's age	0.0696	—	—
Father's age × father's mother	0.0116	—	—
Year 1[†]	0.0007	2.214	1.395–3.513
Year 2[†]	<0.0001	2.484	1.603–3.851
Male[‡]	0.1535	0.786	0.565–1.094
Wealth	0.0616	1.128	0.964–1.281
WEG polygyny[§]	0.0510	—	—
Village 9[¶]	0.4676	—	—
Polygyny × village 9[‖]	0.0934	—	—
WEG boss			
Father's father**	0.6160	1.140	0.683–1.904
Mother's father**	0.5642	0.727	0.245–2.152
Father's brother**	0.4564	1.294	0.657–2.549
Father's father's brother**	0.0274	2.107	1.087–4.086
Unrelated**	0.5884	0.554	0.065–4.699
Miscellaneous**	0.6710	0.832	0.357–1.941
Grandparents			
Father's mother*	0.1026	—	—
Father's father*	0.1316	1.443	0.869–2.324
Mother's mother*	0.9408	0.987	0.691–1.409
Mother's father*	0.5745	1.100	0.788–1.537

The significant interaction of father's age and survival status of father's mother shows that older paternal grandmothers are more harmful than younger paternal grandmothers. Mother's age was omitted because it is collinear with father's age.

*Reference is dead.

[†]Reference is year 3.

[‡]Reference is female.

[§]This variable shows the effect of polygyny in villages 1–8 in terms of the ratio of married women to married men in the WEG.

[¶]Reference is villages 1–8.

[‖]This variable shows the interaction of polygyny and village.

**Reference is father.