Supplementary Table 1. Statistical analyses used to test the effect of kin environment on movement, dispersal, and aggregation. Random effects in parentheses were initially included, and then subsequently removed to avoid overparamaterizing models when the factors failed to explain any model variance.

Test	Response variable	Statistical Analysis	Random Effects (removed)	
Laboratory movement probability	0 , 1 (stay, go)	Binomial GLMM	dam, test dam (year, days)	
Laboratory movement distance	binned distances (0-3)	Poisson GLMM	dam, test dam (year, days)	
Field dispersal probability	0 , 1 (stay, go)	Binomial GLMM/GLM	(year)	
Field dispersal distance	distance in meters	Likelihood-ratio test comparison of distributions*	N/A	
Field aggregation probability	0, 1 (solitary, aggregated)	Binomial GLMM/GLM	(year)	
Field aggregation group size	# individuals joined	Wilcoxon signed-rank test*	N/A	

* Response variable could not be appropriately transformed for use in GLM/GLMMs

Model #	Model main effects	Levels
1	presence of biological mother (w_mom)	0, 1 (absent, present)
2	presence of biological sibling (w_sib)	0, 1 (absent, present)
3	treatment	M/S, FM/FS, M/FS
4	sex	male, female
5	svl	continuous
6	w_mom*sex	
7	w_mom*svl	
8	w_sib*sex	
9	w_sib*svl	
10	treatment*sex	
11	treatment*svl	
12	sex*svl	
13	w_mom*sex*svl	
14	w_sib*sex*svl	
15	treatment*sex*svl	

Supplementary Table 2. Main effects included in all generalized linear models (GLMs) or mixed models (GLMMs).

Test (AIC range)	Model rank	AIC	d.f	Model description	Effect	Test statistic (z or LR χ ²)	Р
Laboratory movement probability (AIC 215-227)					w_mom	2.024	0.043*
	1	215.9	6	w_mom*svl	svl	2.376	0.0175*
					w_mom*svl	-2.025	0.0429*
	2	216.6	4	svl	svl	1.733	0.0830
	3	217.3	4	w_sib	w_sib	-1.480	0.139
Laboratory movement distance (AIC 192-208)					w_mom	2.076	0.0379*
	1	192.4	6	w_mom*svl	svl	2.500	0.0124*
					w_mom*svl	-2.096	0.0361*
	2	193.5	4	svl	svl	1.542	0.1231
	3	194.7	4	w_sib	w_sib	-1.096	0.273
Field dispersal probability (AIC 23-33)	1	23.9	2	w_sib	w_sib	4.210	0.040*
	2	25.8	3	treatment	treatment	4.252	0.119
	3	26.9	2	w_mom	w_mom	1.145	0.2847
Field aggregation probability (AIC 29-39)	1	29.9	2	w_sib	w_sib	4.384	0.036*
	2	31.2	3	treatment	treatment	5.109	0.078
					w_sib	4.384	0.036*
	3	32.7	4	w_sib*sex	sex	0.184	0.668
					w_sib*sex	1.059	0.304

Supplementary Table 3. Top three best fit models for each analysis. Any model below this threshold had non-significant effects. AIC range given below each test is for all 15 models. Asterisk denotes significant effect, and gray fill indicates best fit model.