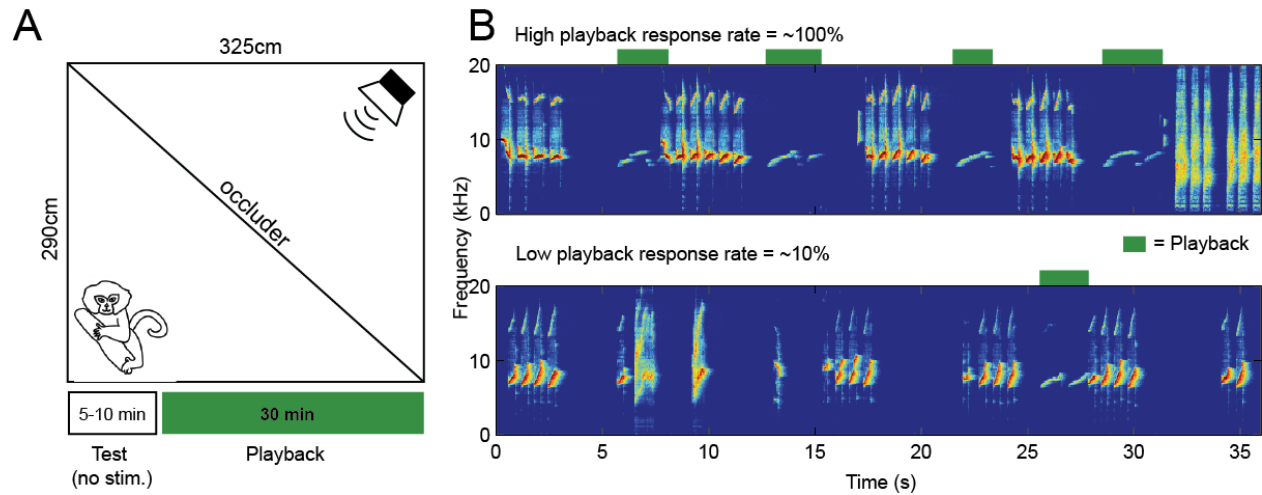**Figure S1. Body weight is not correlated with patch size or vocal responses. Related to Figure 1.** (A) Correlation between body weight and probability to respond to a conspecific call. (B) Correlation between body weight and white patch size. (C) Correlation between white patch size and spontaneous call rate. (D) Correlation between residual white patch size and residual probability to respond to a conspecific call. White patch size, probability of response, and body weight were first rank transformed. Then both white patch size and probability of response were regressed to body weight to obtain the residuals. The rank transformation was needed to make the correlation line match the Spearman correlation value. In all panels, red solid line indicates the regression line, the blue circles indicate the data points, and the dotted red lines shows the 95% confidence interval.

Figure S2. This is the experimental design for contingent vocal feedback. Related to Figure 3 and STAR Methods. (A) Infants were briefly separated from their parents and placed in an acoustically-treated testing room. Computer controlled playbacks were delivered through a speaker. Sessions lasted ~40 minutes with the first 5 (postnatal day 1 to 7) or 10 minutes used to collect spontaneous vocalizations. (B) Twin infants received either high-contingency playbacks (100%) or low contingency playbacks (10%). Spectrograms depict when such playbacks (green) were delivered relative to the infant vocalizations. Warmer colors indicate higher values.

	SumSq	DF	F	pValue
Post-Natal Day (PND)	1.0682e+08	1	12629	< 0.001
Sex	286.75	1	0.0339	0.85404
Condition	3.6353e+05	1	42.979	< 0.001
Family	9.1964e+06	2	543.64	< 0.001
PND:Sex	2.2315e+06	1	263.82	< 0.001
PND:Condition	66004	1	7.8036	0.006
PND:Family	89359e+06	2	528.24	< 0.001
Error	2.5798e+06	305		

Number of observations: 315, Error degrees of freedom: 305
Root Mean Squared Error: 92
R-squared: 0.981, Adjusted R-Squared 0.981
F-statistic vs. constant model: 1.85e+03, p-value < 0.001

Table S1. Pattern of results remains same when weight is excluded from ANOVA. Related to Table 1.

	FStat	pValue
Intercept	8.667	0.003
Post-Natal Day (PND)	20.151	<0.001
Sex	264.15	< 0.001
Condition	3.8115	0.052
PND:Sex	267.86	< 0.001
PND:Condition	8.0188	0.005

Number of observations: 315
Fixed effects coefficients: 6
Random effects coefficients: 6
Covariance parameters: 4
AIC: 3985.8

Table S2. Pattern of results remains the same when using a Linear Mixed Effect Model with Family as grouping (random effect) variable. Related to Table 1.