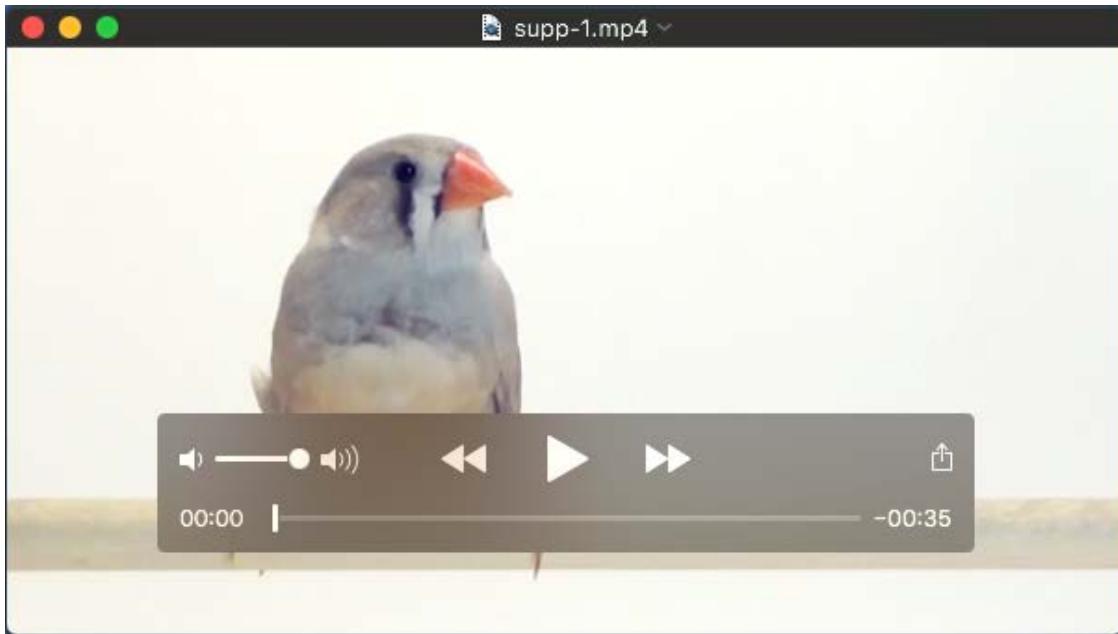


Supplementary information



Movie 1. Example of a stimulus female video played back to subject males during the experiment. All videos featured a perched female zebra finch and ended with a black frame. Videos were recorded at 60 fps at a resolution of 1080 x 1920. File compressed for submission.

Table S1. Efficacy of video playbacks to elicit courtship song.

Female ID	Efficacy (%) across males that produced at least one VD song	Efficacy (%) across all males
bl5b	100	100
unbanded	75	50
p158b58	91.7	40.7
b83	55.6	35.7
y77y70	46.7	26.9
p47	25	25

Table S2: Summary statistics for measures of motivation to produce courtship song

	Per exposure														
	Courtship probability			Total song duration			# of song bouts			First bout duration			Bout duration		
	df	χ^2	p	df	χ^2	p	df	χ^2	p	df	χ^2	p	df	χ^2	p
condition	1	13.78	0.0323	1	69.6	<0.0001	1	5.23	0.0221	1	38.7	<0.0001	2	46.5	<0.0001
block	2	21.10	0.0122	2	52	<0.0001	2	0.95	0.6221	2	34.1	<0.0001	2	21	<0.0001
exposure	2	2.62	0.9776	2	27.8	<0.0001	2	1.54	0.4626	2	30.1	<0.0001	1	40.3	<0.0001
bout												6	129.6	<0.0001	
condition*exposure	2	0.75	0.8605	2	2.4	0.2995	2	0.12	0.9406	2	0.5	0.7845	2	3.1	0.2080
block*exposure	4	2.31	0.8047	4	2.3	0.3627	4	3.05	0.5499	4	18.3	0.0011	4	10.6	0.0318
condition*block	2	7.45	0.0588	2	20.3	<0.0001	2	3.34	0.1879	2	9.9	0.0071	2	2.1	0.3560
block*bout												9	8.4	0.0795	
exposure*bout												6	4.6	0.3338	
condition*bout												3	0.1	0.9680	
condition*block*exposure	4	0.16	0.9971	4	4	0.4057	4	0.55	0.9684	4	4.2	0.3754	4	3.3	0.5156
block*exposure*bout												8	36.5	<0.0001	
block*condition*bout												4	4.6	0.2000	
exposure*condition*bout												4	9.8	0.0431	
block*exposure*condition*bout												2	2	0.3760	

Table S3: Summary statistics for performance aspects of courtship song

	All bouts						First bout					
	Introductory notes			First motif duration			Introductory notes			First motif duration		
	df	χ^2	p	df	χ^2	p	df	χ^2	p	df	χ^2	p
condition	1	1.3	0.2574	1	0.5	0.4790	1	0.03	0.8532	1	1.6	0.2058
block	2	0.9	0.6326	2	2.9	0.2313	2	0.09	0.9572	2	0.25	0.8828
exposure	2	2.1	0.3441	2	3.4	0.1807	2	0.16	0.9239	2	3.64	0.1623
bout	6	123.9	<0.0001	5	7.5	0.1851						
condition*exposure	2	0.2	0.8893	2	0.1	0.9490	2	0.1	0.9516	2	0.17	0.9165
block*exposure	4	0.8	0.9415	4	3.7	0.4428	4	3.38	0.4966	4	8.42	0.0774
condition*block	2	0.3	0.8678	2	1.8	0.4083	2	0.84	0.6558	2	1.91	0.3839
block*bout	9	4.4	0.8841	9	6.8	0.6608						
exposure*bout	6	3.2	0.7868	6	2.9	0.8170						
condition*bout	3	3.6	0.3042	3	0.5	0.9236						
condition*block*exposure	4	2	0.7412	4	3.2	0.5255	4	1.73	0.7847	4	2.17	0.7039
block*exposure*bout	9	12.8	0.1685	9	10.7	0.2970						
block*condition*bout	4	3.3	0.5032	4	1.3	0.8660						
exposure*condition*bout	3	1	0.7977	4	1	0.9029						
block*exposure*condition*bout	2	1.2	0.5460	2	0.9	0.6420						