

## Supplemental Materials (Tables)

### Pairwise Comparisons (simple effects)

Dependent Variable: IOS

Coupling	(I) Rhythm	(J) Rhythm	Mean Difference (I-J)	Std. Error	Sig. <sup>b</sup>	95% Confidence Interval for Difference <sup>b</sup>	
						Lower Bound	Upper Bound
Full	Regular rhythm	Irregular rhythm	.167	.557	.766	-.955	1.289
		Improvisation (no external rhythm)	-.833	.557	.142	-1.955	.289
	Irregular rhythm	Regular rhythm	-.167	.557	.766	-1.289	.955
		Improvisation (no external rhythm)	-1.000	.557	.079	-2.122	.122
	Improvisation (no external rhythm)	Regular rhythm	.833	.557	.142	-.289	1.955
		Irregular rhythm	1.000	.557	.079	-.122	2.122
Visual only	Regular rhythm	Irregular rhythm	.302	.557	.591	-.820	1.424
		Improvisation (no external rhythm)	-.865	.557	.127	-1.987	.257
	Irregular rhythm	Regular rhythm	-.302	.557	.591	-1.424	.820
		Improvisation (no external rhythm)	-1.167*	.557	.042	-2.289	-.045
	Improvisation (no external rhythm)	Regular rhythm	.865	.557	.127	-.257	1.987
		Irregular rhythm	1.167*	.557	.042	.045	2.289
Haptic only	Regular rhythm	Irregular rhythm	.167	.557	.766	-.955	1.289
		Improvisation (no external rhythm)	.100	.584	.865	-1.077	1.277
	Irregular rhythm	Regular rhythm	-.167	.557	.766	-1.289	.955
		Improvisation (no external rhythm)	-.067	.584	.910	-1.244	1.110
	Improvisation (no external rhythm)	Regular rhythm	-.100	.584	.865	-1.277	1.077
		Irregular rhythm	.067	.584	.910	-1.110	1.244

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

**Table S1: Simple effects table showing a significant simple effect of visual coupling and a near significant simple effect of full feedback on closeness comparing the improvisation (mutual entrainment only) and irregular rhythm conditions, with significantly stronger closeness with improvisation (no external rhythm) (Experiment 2).**

**Rhythm\*Coupling\*Time**

Measure: Closeness

Rhythm	Coupling	time	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Regular rhythm	Full	1	2.333	.593	1.139	3.528
		2	2.667	.556	1.548	3.786
	Visual only	1	2.500	.593	1.305	3.695
		2	2.968	.556	1.849	4.087
	Haptic only	1	2.833	.593	1.639	4.028
		2	3.333	.556	2.214	4.452
	Irregular rhythm	1	3.000	.593	1.805	4.195
		2	3.167	.556	2.048	4.286
Improvisation (mutual entrainment only)	Visual only	1	1.667	.593	.472	2.861
		2	1.833	.556	.714	2.952
	Haptic only	1	2.000	.593	.805	3.195
		2	2.333	.556	1.214	3.452
	Full	1	1.667	.593	.472	2.861
		2	2.833	.556	1.714	3.952
	Visual only	1	2.333	.593	1.139	3.528
		2	3.667	.556	2.548	4.786
	Haptic only	1	1.333	.593	.139	2.528
		2	2.500	.556	1.381	3.619

**Table S2: Estimated Marginal Means comparisons for each combination of levels of the rhythm and coupling factors at pre- and post- trial points for IOS scores in Experiment 2.**