

Supplementary Online Materials for:

**Effects of experience with L2 and music on rhythmic grouping by French listeners**

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Supplementary Table 1: Specification of the PCA including the data of the musicality questionnaire.

Musicality		PC 1	PC 2	PC 3
Summary	Standard deviation	1.55	0.57	0.53
	Proportion of Variance	0.80	0.11	0.09
	Cumulative Proportion	0.80	0.91	1.00
Loadings	Length of formal musical training (in years)	0.584		0.808
	Number of acquired musical instruments	0.573	-0.747	-0.337
	Age of acquisition of the first instrument (in years)	0.575	0.659	-0.484
	SS loadings	1.000	1.000	1.000
	Proportion Var	0.333	0.333	0.333
	Cumulative Var	0.333	0.667	1.000

Supplementary Table 2. Parameters of the linear mixed-effects logit regression including group and manipulation steps as fixed factors. For fixed effects, regression coefficients ( $\beta$ ), their standard errors ( $SE$ ),  $z$ -scores and the respective  $p$ -values are given. For random effects, variance and standard deviations are given.

<b>Fixed effects</b>	<b><math>\beta</math></b>	<b><math>SE</math></b>	<b><math>z</math></b>	<b><math>p</math></b>
Intercept (= grand mean)	0.17	0.03	5.08	< .001
L2-F	0.15	0.08	1.84	.07, n.s.
G-L2	-0.02	0.08	-0.20	.84, n.s.
manipstepF150-200	0.20	0.09	2.27	.02
manipstepF100-150	0.12	0.09	1.42	.15, n.s.
manipstepF50-100	0.56	0.08	6.67	< .001
manipstepF0-50	0.38	0.08	4.57	< .001
manipstepF2-0	0.04	0.09	0.53	.59732
manipstepF4-2	0.28	0.09	3.22	< .01
manipstepF6-4	0.08	0.09	0.87	.38, n.s.
manipstepF8-6	0.15	0.09	1.60	.11, n.s.
L2-F*150-200	-0.19	0.21	-0.91	.36, n.s.
F-L2*150-200	0.17	0.23	0.77	.44, n.s.
L2-F*100-150	-0.25	0.20	-1.23	.22, n.s.
G-L2*100-150	0.28	0.22	1.28	.20, n.s.
L2-F*50-100	0.45	0.20	2.23	.03
G-L2*50-100	0.57	0.21	2.72	< .01
L2-F*0-50	-0.12	0.20	-0.60	.55, n.s.
G-L2*0-50	0.56	0.21	2.72	< .01
L2-F*2-0	0.11	0.20	0.52	.60, n.s.
G-L2*2-0	-0.14	0.21	-0.65	.51, n.s.
L2-F*4-2	-0.15	0.21	-0.74	.46, n.s.
G-L2*4-2	0.24	0.22	1.08	.28, n.s.
L2-F*6-4	0.11	0.21	0.51	.61, n.s.
G-L2*6-4	-0.27	0.22	-1.22	.22, n.s.
L2-F*8-6	-0.06	0.21	-0.30	.76, n.s.
G-L2*8-6	0.23	0.23	1.00	.32, n.s.

<b>Groups Name</b>	<b>Variance</b>	<b>Std.Dev.</b>
Stimulus(Intercept)	< 0.00001	0.000033
Participant(Intercept)	0.0814	0.2852

Figure S1. Mean proportion of trochaic responses (0 = “iambic”, 1 = “trochaic”) and their standard errors broken down by Manipulation step (200 ms – 8 dB) and Group.

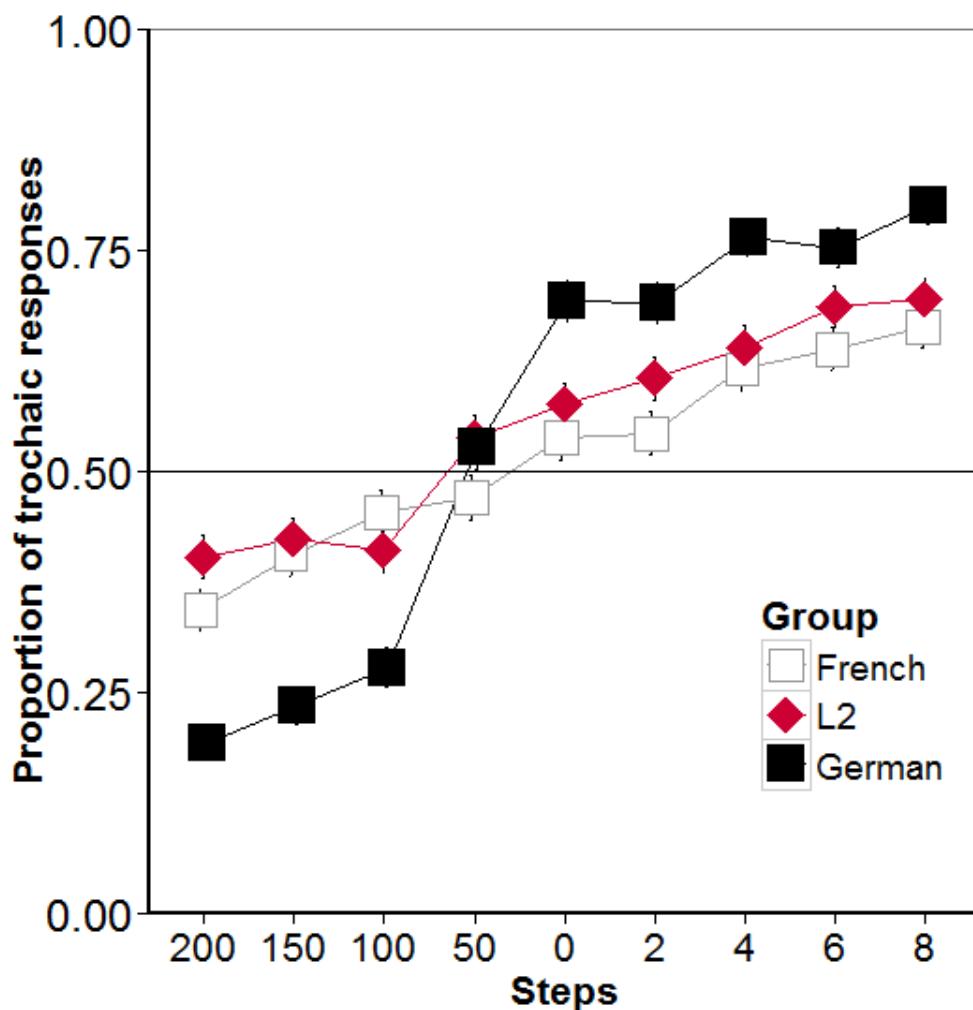


Table S3: Specification of the PCAs conducted for the five multicovariate analyses in Part 3

<b>Musicality</b>		<b>PC 1</b>	<b>PC 2</b>	<b>PC 3</b>
Summary	Standard deviation	1.50	0.69	0.52
	Proportion of Variance	0.75	0.16	0.09
	Cumulative Proportion	0.75	0.91	1.00
Loadings	Length of formal musical training (in years)	0.60	0.30	0.74
	Number of acquired musical instruments	0.54	-0.83	-0.11
	Age of acquisition of the first instrument (in years)	0.59	0.47	-0.66
		SS loadings	1.00	1.00
		Proportion Var	0.33	0.33
		Cumulative Var	0.33	0.67
				1.00
<b>Acq-Interacting</b>		<b>PC 1</b>	<b>PC 2</b>	
Summary	Standard deviation	1.12	0.86	
	Proportion of Variance	0.63	0.37	
	Cumulative Proportion	0.63	1.00	
Loadings	Friends	0.71	-0.71	
	Family	0.71	0.71	
	SS loadings	1.0	1.0	
		Proportion Var	0.5	0.5
		Cumulative Var	0.5	1.0
<b>Acq-Listening</b>		<b>PC 1</b>	<b>PC 2</b>	
Summary	Standard deviation	1.25	0.67	
	Proportion of Variance	0.78	0.22	
	Cumulative Proportion	0.78	1.00	
Loadings	Length of formal musical training (in years)	0.71	-0.71	
	Age of acquisition of the first instrument (in years)	0.71	0.71	
		SS loadings	1.0	1.0
		Proportion Var	0.5	0.5
		Cumulative Var	0.5	1.0

<b>Cur-Auditory</b>		<b>PC 1</b>	<b>PC 2</b>	<b>PC 3</b>	<b>PC 4</b>
Summary	Standard deviation	1.44	0.96	0.77	0.64
	Proportion of Variance	0.52	0.23	0.15	0.10
	Cumulative Proportion	0.52	0.75	0.90	1.00
Loadings	TV	-0.59	-0.13	0.21	0.77
	Radio	-0.44	0.62	-0.65	
	Friends	-0.40	-0.75	-0.42	-0.32
	Family	-0.55	0.19	0.60	-0.55
	SS loadings	1.00	1.00	1.00	1.00
	Proportion Var	0.25	0.25	0.25	0.25
	Cumulative Var	0.25	0.50	0.75	1.00

<b>Self-estimated proficiency</b>		<b>PC 1</b>	<b>PC 2</b>	<b>PC 3</b>	<b>PC 4</b>	<b>PC 5</b>
Summary	Standard deviation	1.94	0.87	0.52	0.38	0.24
	Proportion of Variance	0.75	0.15	0.05	0.03	0.01
	Cumulative Proportion	0.75	0.90	0.96	0.99	1.00
Loadings	Pronunciation	-0.49		0.19	0.84	0.13
	Oral skills	-0.47	0.412		-0.18	-0.76
	Degree of foreignness of accent	-0.41	-0.52	-0.74		
	Strength of accent	-0.42	-0.54	0.62	-0.37	0.10
	Comprehension skills	-0.45	0.52	-0.16	-0.34	0.63
	SS loadings	1.0	1.0	1.0	1.0	1.0
	Proportion Var	0.2	0.2	0.2	0.2	0.2
	Cumulative Var	0.2	0.4	0.6	0.8	1.0