

Supplementary material

Table S1. *Structure of the protocol.*

Block 1	Block 2	Block 3	Block 4	Block 5
Questionnaire	Fluency ^{a,b} (first run)	Executive tests	Lexical tasks ^c	Fluency ^{a,b} (second run)
	1. Phon. (Lang. A) 2. Sem. (Lang. B)	1. IFS (with WM index) 2. WCST	1. Task A 2. Task B (Picture naming ^d or reading/translation ^e)	1. Phon. (Lang. B) 2. Sem. (Lang. A)

^a The counterbalancing of phonemes for the phonological fluency task is shown in Table S2.

^b Language A or B could be either L1 (for odd participants, such as 1, 3, 5) or L2 (for even participants, such as 2, 4, 6). For each participant, the language assigned to each task on the first run was switched on the second run.

^c Task A or B could be either picture naming (for odd participants, such as 1, 3, 5) or word reading/translation (for even participants, such as 2, 4, 6).

^d The counterbalancing of languages for the picture naming task is shown in Table S3.

^e The counterbalancing of conditions for the reading and translation tasks is shown in Table S4.

Table S2. *Counterbalancing of verbal fluency tasks.*

	First run			Second run		
	Phonological		Semantic	Phonological		Semantic
	<i>Language</i>	<i>Phonemes</i>	<i>Language</i>	<i>Language</i>	<i>Phonemes</i>	<i>Language</i>
1.	L1	f, a, s	L2	L2	s, a, f	L1
2.	L2	f, s, a	L1	L1	a, s, f	L2
3.	L1	a, s, f	L2	L2	f, s, a	L1
4.	L2	a, f, s	L1	L1	s, f, a	L2
5.	L1	s, a, f	L2	L2	f, a, s	L1
6.	L2	s, f, a	L1	L1	a, f, s	L2

Note: The same counterbalancing scheme was applied for each group separately, guaranteeing the same distribution of tasks, conditions, and languages in each sample.

Table S3. *Counterbalancing of picture naming tasks.*

	First run		Second run	
	Block 1	Block 2	Block 1	Block 2
1.	L1	L2	L2	L1
2.	L2	L1	L1	L2
3.	L1	L1	L2	L2
4.	L2	L2	L1	L1

Note: The same counterbalancing scheme was applied for each group separately, guaranteeing the same distribution of tasks, conditions, and languages in each sample.

Table S4. *Counterbalancing of word reading and translation tasks.*

	Task 1	Task 2	Task 3	Task 4
1.	L1R	L2R	FT	BT
2.	L1R	L2R	BT	FT
3.	L1R	FT	L2R	BT
4.	L1R	FT	BT	L2R
5.	L1R	BT	L2R	FT
6.	L1R	BT	FT	L2R
7.	L2R	L1R	BT	FT
8.	L2R	L1R	FT	BT
9.	L2R	FT	BT	L1R
10.	L2R	FT	L1R	BT
11.	L2R	BT	FT	L1R
12.	L2R	BT	L1R	FT
13.	FT	L1R	L2R	BT
14.	FT	L1R	BT	L2R
15.	FT	L2R	L1R	BT
16.	FT	L2R	BT	L1R
17.	FT	BT	L1R	L2R
18.	FT	BT	L2R	L1R
19.	BT	L1R	FT	L2R
20.	BT	L1R	L2R	FT
21.	BT	L2R	FT	L1R
22.	BT	L2R	L1R	FT
23.	BT	FT	L2R	L1R
24.	BT	FT	L1R	L2R

Note: The same counterbalancing scheme was applied for each group separately, guaranteeing the same distribution of tasks, conditions, and languages in each sample.

Table S5. Percentage and number of subjects excluded from each task (considering acquisition problems and removal of outliers for each task and condition).

	<i>Percentage of subjects excluded</i>	<i>Number of subjects excluded</i>
Phonological fluency	17.6 %	6
Semantic fluency	20.5 %	7
Picture naming accuracy	14.7 %	5
Picture naming RTs	11.7 %	4
Word reading accuracy	0 %	0
Word reading RTs	0 %	0
Word translation accuracy	5.9 %	2
Word translation RTs	0 %	0

Table S6. Correlation between years of interpreting experience and performance.

		<i>Spearman's rho</i>	<i>p-value</i>
Years of interpreting experience	Phonological fluency L1	-0.443	0.098
	Phonological fluency L2	0.101	0.575
	Semantic fluency L1	-0.027	0.935
	Semantic fluency L2	0.108	0.701
	BT RTs	-0.538	0.026
	FT RTs	-0.514	0.035

Table S7a. Multiple linear regressions for phonological fluency performance.

	<i>R²</i>	Overall model test			
		<i>F</i>	<i>df1</i>	<i>df2</i>	<i>p-value</i>
L1	0.187	0.765	3	10	.539
L2	0.163	0.584	3	9	.640

Table S7b. Multiple linear regressions for semantic fluency performance.

	<i>R²</i>	Overall model test			
		<i>F</i>	<i>df1</i>	<i>df2</i>	<i>p-value</i>
L1	0.274	0.879	3	7	.497
L2	0.00973	0.359	3	10	.784

Table S7c. *Multiple linear regressions for picture naming performance.*

	R^2	Overall model test			
		F	$df1$	$df2$	p -value
L1 accuracy	0.288	1.48	3	11	.288
L2 accuracy	0.134	0.567	3	11	.134
L1 RTs	0.108	0.442	3	11	.728
L2 RTs	0.183	0.823	3	11	.508

Table S7d. *Multiple linear regressions for word translation performance.*

	R^2	Overall model test			
		F	$df1$	$df2$	p -value
BT accuracy	0.299	1.56	3	11	.254
FT accuracy	0.203	0.418	3	12	.418
BT RTs	0.273	1.50	3	12	.265
FT RTs	0.196	0.974	3	12	.437

Table S7e. *Multiple linear regressions for word reading performance.*

	R^2	Overall model test			
		F	$df1$	$df2$	p -value
L1 accuracy	0.130	0.6	3	12	.627
L2 accuracy	0.299	1.71	3	12	.219
L1 RTs	0.208	1.05	3	12	.405
L2 RTs	0.228	1.18	3	12	.359

Table S8a. *Multiple linear regressions for word translation performance, for both groups.*

	R^2	Overall model test			
		F	$df1$	$df2$	p -value
BT accuracy (predicted from BT competence)	0.234	0.744	1	31	.395
BT RTs (predicted from BT competence)	0.248	10.6	1	32	.003
FT accuracy (predicted from FT competence)	0.0176	0.555	1	31	.462
FT RTs (predicted from FT competence)	0.193	7.68	1	32	.009

Table S8b. *Multiple linear regressions for word translation performance of NIBs.*

	<i>R</i> ²	Overall model test			
		<i>F</i>	<i>df1</i>	<i>df2</i>	<i>p-value</i>
BT accuracy (predicted from BT competence)	0.0158	0.242	1	15	.630
BT RTs (predicted from BT competence)	0.105	1.77	1	15	.204
FT accuracy (predicted from FT competence)	0.119	1.89	1	14	.190
FT RTs (predicted from FT competence)	0.000019	0.00029	1	15	.987

Table S8c. *Multiple linear regressions for word translation performance of PSIs.*

	<i>R</i> ²	Overall model test			
		<i>F</i>	<i>df1</i>	<i>df2</i>	<i>p-value</i>
BT accuracy (predicted from BT competence)	0.0564	0.837	1	14	.376
BT RTs (predicted from BT competence)	0.195	3.63	1	15	.076
FT accuracy (predicted from FT competence)	0.0908	1.50	1	15	.240
FT RTs (predicted from FT competence)	0.308	6.67	1	15	.021