

The supplementary file includes two tables and the syntax of the R models (i.e., Appendix S1). Table S1 presents the results of the flanker task, while Table S2 presents the outcome of the linear mixed-effects model examining the switching costs and language dominance effect. (file type: pdf, file size: 168KB)

Table S1. Mean reaction times (RT, ms, standard deviations) and accuracy (%) (standard deviations) in the flanker task.

	RT	Accuracy
Congruent	438 (72)	99 (.09)
Incongruent	483 (75)	97 (.18)
Conflict effect	45 (20)	-2 (.09)
Global performance	460 (46)	-

Table S2. Outcome of the linear mixed-effects model examining the switching costs and language dominance effect in the self-paced reading task.

Fixed effects				
Predictor	Estimate	SE	t	95% CI
<i>Intercept</i>	6.261	.043	144.24***	[6.174, 6.349]
Block type	-.214	.028	7.65***	[-.270, -.157]
Language	.365	.047	7.71***	[.270, .460]
Trial type	-.113	.035	3.20**	[-.185, .042]
Block type × Language	.007	.041	.17	[-.076, .090]
Block type × Trial type	.045	.027	1.69†	[-.007, .098]
Language × Trial type	.316	.071	4.45***	[.172, .459]
Block type × Language × Trial type	-.137	.054	2.54*	[-.243, -.031]
Trial type				

Note. † $p < .1$; * $p < .05$; ** $p < .01$; *** $p < .001$.

Appendix S1.

The syntax of the R models

For all models reported in the study:

AoL.c=centered age of learning English;

L2 proficiency.c=centered OPT score;

Daily switch.c=centered frequency of code-switching in daily lives.

The syntax of the linear mixed-effects model examining the switching costs and language dominance effect in the self-paced reading task:

Formula: $\log RT \sim \text{Block type} * \text{Language} * \text{Trial type} + \text{AoL.c} + \text{L2 proficiency.c} + \text{Daily switch.c} + (1 + \text{Language} + \text{Block type} | \text{Subject}) + (1 + \text{Trial type} + \text{Block type} | \text{Item})$.

The syntax of the linear mixed-effects models examining the switch costs and language dominance effect for the alternation and dense CS mixed blocks, and L1 and L2:

When the baseline was alternation mixed block L1, the model was: $\log RT \sim \text{Block type} * \text{Language} * \text{Trial type} + \text{AoL.c} + \text{L2 proficiency.c} + \text{Daily switch.c} + (1 + \text{Block type} | \text{Subject}) + (1 + \text{Trial type} + \text{Block type} | \text{Item})$;

When the baseline was alternation mixed block L2, the model was: $\log RT \sim \text{Block type} * \text{Language} * \text{Trial type} + \text{AoL.c} + \text{L2 proficiency.c} + \text{Daily switch.c} + (1 + \text{Language}$

+ Trial type | Subject) + (1 + Language + Trial type + Block type | Item);

When the baseline was dense CS mixed block L1, the model was: $\log RT \sim$ Block type

* Language * Trial type + AoL.c + L2 proficiency.c + Daily switch.c + (1 + Language + Block type | Subject) + (1 + Trial type + Block type | Item);

When the baseline was dense CS mixed block L2, the model was: $\log RT \sim$ Block type

* Language * Trial type + AoL.c + L2 proficiency.c + Daily switch.c + (1 + Language + Block type | Subject) + (1 + Trial type + Block type | Item).

The syntax of the linear mixed-effects model examining the correlations between cognitive control measures and language control measures in alternation mixed block:

When the baseline was L1, the conflict effect model was: $\log RT \sim$ Conflict effect * Language * Trial type + AoL.c + L2 proficiency.c + Daily switch.c + (1 | Subject) + (Language + Trial type | Item);

When the baseline was L2, the conflict effect model was: $\log RT \sim$ Conflict effect * Language * Trial type + AoL.c + L2 proficiency.c + Daily switch.c + (1 + Language | Subject) + (1 + Trial type | Item);

When the baseline was L1, the global RTs model was: $\log RT \sim$ Global RTs * Language * Trial type + AoL.c + L2 proficiency.c + Daily switch.c + (1 + Language + Trial type | Subject) + (1 + Trial type | Item);

When the baseline was L2, the global RTs model was: $\log RT \sim$ Global RTs * Language * Trial type + AoL.c + L2 proficiency.c + Daily switch.c + (1 + Language + Trial type | Subject) + (1 + Trial type | Item).

The syntax of the linear mixed-effects model examining the correlations between cognitive control measures and language control measures in dense CS mixed block:

When the baseline was L1, the conflict effect model was: $\log RT \sim \text{Conflict effect} * \text{Language} * \text{Trial type} + \text{AoL.c} + \text{L2 proficiency.c} + \text{Daily switch.c} + (1 + \text{Language} | \text{Subject}) + (1 + \text{Trial type} | \text{Item});$

When the baseline was L2, the conflict effect model was: $\log RT \sim \text{Conflict effect} * \text{Language} * \text{Trial type} + \text{AoL.c} + \text{L2 proficiency.c} + \text{Daily switch.c} + (1 + \text{Language} | \text{Subject}) + (1 + \text{Language} + \text{Trial type} | \text{Item});$

When the baseline was L1, the global RTs model was: $\log RT \sim \text{Conflict effect} * \text{Language} * \text{Trial type} + \text{AoL.c} + \text{L2 proficiency.c} + \text{Daily switch.c} + (1 | \text{Subject}) + (1 + \text{Trial type} | \text{Item});$

When the baseline was L2, the global RTs model was: $\log RT \sim \text{Conflict effect} * \text{Language} * \text{Trial type} + \text{AoL.c} + \text{L2 proficiency.c} + \text{Daily switch.c} + (1 | \text{Subject}) + (1 + \text{Trial type} | \text{Item}).$