

Supplementary tables S1-S7 with descriptive statistics and model coefficients.

Table S1. *Descriptive Statistics for the Participant-related Variables (N = 93).*

Measure	<i>M (SD)</i>	Range
DIALANG Vocabulary Placement Test in English (L2)	668.65 (166.72)	264-1000
DIALANG Vocabulary Placement Test in Italian (L3)	433.12 (217.22)	20-1000
Polish Reading Span (PRSPAN)	32.31 (5.63)	15.5-49
LLAMA-B	61.37 (21.71)	15-100

Table S2. *Descriptive Statistics for the Stimuli in the Word-knowledge Task (L3-test)*

	L1=L2=L3 cognates	L2=L3 cognates	Non-cognates		
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>p</i>	Effect size
	95% CI	95% CI	95% CI		
Frequency in	0.27 (1.33)	0.42 (1.88)	0.81 (1.45)	<i>p</i> = .290	$\eta^2 = .021$
Polish	[-0.15, 0.70]	[-0.18, 1.02]	[0.35, 1.28]		[0.00, 0.08]
Frequency in	1.44 (1.08)	1.44 (1.38)	1.78 (1.39)	<i>p</i> = .412	$\eta^2 = .015$
English	[1.10, 1.79]	[1.00, 1.89]	[1.33, 2.22]		[0.00, 0.07]
Frequency in	1.19 (1.49)	1.47 (1.65)	1.37 (1.35)	<i>p</i> = .689	$\eta^2 = .006$
Italian	[0.71, 1.66]	[0.95, 2.00]	[0.94, 1.80]		[0.00, 0.05]
Concreteness in	3.13 (1.02)	3.11 (0.99)	3.14 (1.07)	<i>p</i> = .986	$\eta^2 = .000$
English	[2.80, 3.45]	[2.79, 3.42]	[2.80, 3.48]		[0.00, 0.00]
Length in Polish	8.45 (2.02)	7.83 (2.04)	7.30 (2.32)	<i>p</i> = .058	$\eta^2 = .047$
	[7.80, 9.10]	[7.17, 8.48]	[6.56, 8.04]		[0.00, 0.13]
Length in English	7.55 (1.81)	7.30 (1.80)	6.65 (2.21)	<i>p</i> = .108	$\eta^2 = .037$
	[6.97, 8.13]	[6.72, 7.88]	[5.94, 7.36]		[0.00, 0.11]
Length in Italian	8.28 (1.36)	8.03 (1.87)	7.45 (2.09)	<i>p</i> = .114	$\eta^2 = .036$
	[7.84, 8.71]	[7.43, 8.62]	[6.78, 8.12]		[0.00, 0.11]
Normalised	0.29 (0.18)	0.28 (0.17)	-	<i>p</i> = .655	$\eta^2 = .003$
Levenshtein	[0.24, 0.35]	[0.22, 0.33]			[0.00, 0.07]
Distance (L2-L3)					

Table S3. *Random effects estimates in the model for the accuracy of translating the L3-test keywords*

Groups	Effect	Variance	SD
Subject	(Intercept)	1.36	1.17
	Guessing L3-test keywords (word level)	0.05	0.23
	Word length in Italian	0.05	0.22
Item	(Intercept)	1.55	1.24
	Guessing nonwords	0.07	0.26
	Guessing L3-test keywords	0.01	0.11
	Llama B	0.01	0.11
	Italian proficiency	0.02	0.15

Table S4. *Random effects estimates in the model for the accuracy of using the L3-test keywords in sentences.*

Groups	Effect	Variance	SD
Subject	(Intercept)	1.11	1.06
	Word length (Italian)	0.04	0.19
Item	(Intercept)	1.37	1.19
	Guessing nonwords	0.03	0.17
	Working memory	0.02	0.15
	Italian proficiency	0.01	0.12
	English proficiency	0.01	0.11

Table S5. *Random effects estimates in the model for the speed of keyword recognition in the lexical decision task.*

Groups	Effect	Variance	SD
Subject	(Intercept)	27794.11	166.71
	Word length (Italian)	524.18	22.86
	Word frequency (Italian)	290.41	16.74
Item	(Intercept)	13673.70	116.93
	English proficiency	124.62	10.51
	Working memory	268.75	16.06
	Italian proficiency	214.92	14.42

Table S6. *Random effects estimates in the model for the accuracy of keyword recognition in the lexical decision task.*

Groups	Effect	Variance	SD
Subject	(Intercept)	0.47	0.68
	Word frequency (Italian)	0.01	0.11
Item	(Intercept)	1.98	1.41
	Guessing nonwords	0.05	0.22
	LLAMA-B	0.10	0.32
	False alarms	0.07	0.27
	Italian proficiency	0.07	0.26

Table S7. *Fixed effects estimates in the model for the accuracy of keyword recognition in the lexical decision task.*

	<i>Log-Odds</i>	<i>95% CI</i>	<i>z</i>	<i>p</i>
(Intercept)	4.01	3.45 – 4.56	14.21	<.001***
L2-L3 vs Non-cognates	-0.93	-1.63 – -0.24	-2.62	.009**
L2-L3 vs L1-L2-L3 Cognates	-0.11	-0.83 – 0.60	-0.31	.759
Frequency in Italian	0.79	0.32 – 1.26	3.28	.001**
Italian proficiency	0.63	0.35 – 0.91	4.37	<.001***
Working memory	0.23	0.03 – 0.43	2.24	.025*
LLAMA-B	0.06	-0.14 – 0.26	0.54	.587
English proficiency	0.34	0.10 – 0.57	2.81	.005**
Nonword guessing	-0.44	-0.62 – -0.26	-4.74	<.001***
False alarms	0.43	0.22 – 0.64	4.01	<.001***
L2-L3 vs Non-cognates × Italian Proficiency	0.05	-0.24 – 0.33	0.33	.744
L2-L3 vs L1-L2-L3 × Italian proficiency	-0.16	-0.46 – 0.15	-1.016	.310
L2-L3 vs Non-cognates × English Proficiency	-0.27	-0.48 – -0.06	-2.55	.011*
L2-L3 vs L1-L2-L3 × English proficiency	-0.26	-0.49 – -0.04	-2.27	.023*
L2-L3 vs Non-cognates × Frequency in Italian	-0.47	-1.15 – 0.22	-1.34	.181
L2-L3 vs L1-L2-L3 × Frequency in Italian	-0.75	-1.43 – -0.08	-2.18	.029*

Note. Number of data points: 10234, Subject: 86, Items: 119, contrasts are treatment coded with the reference level L2-L3 cognates. Pooled marginal R^2 of the model is approx. 0.26. For the random effects of the model see Appendix 6, Table A4. * $p < .05$. ** $p < .01$. *** $p < .001$