Individual differences in visual word recognition: The role of epistemically unwarranted beliefs on affective processing and signal detection

SUPPLEMENTARY MATERIAL: Linear mixed-effects models (LMEM) analyses over lexical decision task (LDT) response times (RTs)

LMEM comparison and final selection (PEUBI-S as EUB score, interaction with Valence)

		Model comp	parison		
Model	Model fit		Likelihood ratio test		
	logLike	AIC	χ ²	df	p
SEOM	-156047	312134			
IEAM	-156046	312135	0.99	1	.319
		Fixed eff	Pects		
	b	SE	95% CI	t	p
Intercept	638.60	72.50	[496.47, 780.67]	8.81	<.001
WPrev	-64.30	9.90	[-83.70, -44.90]	-6.50	<.001
Log_Frq	-35.18	4.67	[-44.34, -26.02]	-7.53	<.001
Log_abs_tok_MBOF	26.33	7.42	[11.80, 40.86]	3.55	<.001
Log_abs_tok_MTOF	-2.81	3.64	[-9.95, 4.33]	-0.77	.441
Num_letters	3.85	1.63	[0.66, 7.03]	2.37	.019
N	0.10	0.47	[-0.83, 1.02]	0.20	.839
NLD	-37.78	9.28	[-55.97, -19.59]	-4.07	<.001
Fam	-15.67	3.10	[-21.73, -9.60]	-5.06	<.001
AoA	4.66	1.72	[1.29, 8.02]	2.71	.007
Conc	3.53	2.69	[-1.74, 8.81]	1.31	.191
Val	-2.65	1.75	[-6.08, 0.79]	-1.51	.132
Aro	-3.43	2.34	[-8.01, 1.14]	-1.47	.143
Dict_Sen	-0.48	0.48	[-1.43, 0.47]	-0.98	.326
Trial	-0.05	0.00	[-0.05, -0.04]	-12.82	<.001

PrevError	13.97	2.50	[9.08, 18.86]	5.60	<.001
PEUBI-S	-1.36	1.26	[-3.83, 1.10]	-1.09	.280
		Random effe	ects		
	Variance	SD			
Testa en en tal Téanna	1205	25.09	-		
Intercept Items	1295	35.98			
Intercept Subjects	5170	71.91			
D 11 1	10252	101.25	_		
Residual	10252	101.25			
		Model fit	 :		
		1	1		
	Marginal	Conditional			
R ²	14.29%	47.44%	-		

Note. SEOM = simple effects only model; IEAM = interactive effects added model; WPrev = word prevalence (in z scores); Log_Frq = word frequency (in logarithmic scale); Log_abs_tok_MBOF = bigram frequency (in logarithmic scale); Log_abs_tok_MTOF = trigram frequency (in logarithmic scale); Num_letters = number of letters; N = orthographic neighbours; NLD = normalized Levenshtein distance between Spanish-Catalan translations; Fam = familiarity; AoA = Age of acquisition; Conc = concreteness; Val = emotional valence; Aro = emotional arousal; Dict_Sen = dictionary senses; Trial = trial order; PrevError = Correct/Incorrect response in the preceding trial; PEUBI-S = superstitions.

LMEM comparison and final selection (PEUBI-OP as EUB score, interaction with Valence)

		Model com	parison		
Model	Model fit		Likelihood ratio test		
	logLike	AIC	χ ²	df	p
SEOM	-156047	312135			
IEAM	-156046	312134	2.18	1	.140
	L	Fixed ef	fects	1	I
	b	SE	95% CI	t	p
Intercept	628.90	75.20	[481.54, 776.33]	8.36	<.001
WPrev	-64.30	9.90	[-83.70, -44.90]	-6.50	<.001
Log_Frq	-35.18	4.67	[-44.34, -26.02]	-7.53	<.001
Log_abs_tok_MBOF	26.33	7.42	[11.80, 40.86]	3.55	<.001
Log_abs_tok_MTOF	-2.81	3.64	[-9.95, 4.33]	-0.77	.441
Num_letters	3.85	1.63	[0.66, 7.03]	2.37	.019
Ν	0.10	0.47	[-0.83, 1.02]	0.20	.839
NLD	-37.78	9.28	[-55.97, -19.59]	-4.07	<.001
Fam	-15.67	3.10	[-21.73, -9.60]	-5.06	<.001
AoA	4.66	1.72	[1.29, 8.02]	2.71	.007
Conc	3.53	2.69	[-1.74, 8.81]	1.31	.191
Val	-2.65	1.75	[-6.08, 0.79]	-1.51	.132
Aro	-3.43	2.34	[-8.01, 1.14]	-1.47	.143
Dict_Sen	-0.48	0.48	[-1.43, 0.47]	-0.98	.326
Trial	-0.05	0.00	[-0.05, -0.04]	-12.82	<.001

DuessEmer	12.00	2.50	10 00 10 071	5 60	< 001
PrevError	13.98	2.50	[9.08, 18.87]	5.60	< .001
	_				
PEUBI-OP	-0.39	0.95	[-2.26, 1.47]	-0.41	.680
		Random eff	ects		·
	Variance	SD			
	variance	50			
Intercent Items	1295	35.98	-		
Intercept Items	1293	55.90			
			_		
Intercept Subjects	5227	72.30			
Residual	10252	101.25			
	•	Model fi	t		
	Marginal	Conditional			
	iviai gillal	Conditional			
D ²	14.010/	47 440/	4		
\mathbb{R}^2	14.01%	47.44%			
	1				

Note. SEOM = simple effects only model; IEAM = interactive effects added model; WPrev = word prevalence (in z scores); Log_Frq = word frequency (in logarithmic scale); Log_abs_tok_MBOF = bigram frequency (in logarithmic scale); Log_abs_tok_MTOF = trigram frequency (in logarithmic scale); Num_letters = number of letters; N = orthographic neighbours; NLD = normalized Levenshtein distance between Spanish-Catalan translations; Fam = familiarity; AoA = Age of acquisition; Conc = concreteness; Val = emotional valence; Aro = emotional arousal; Dict_Sen = dictionary senses; Trial = trial order; PrevError = Correct/Incorrect response in the preceding trial; PEUBI-OP = occultism and pseudoscience.

LMEM comparison and final selection (PEUBI-TR as EUB score, interaction with Valence)

		Model com	parison		
Model	Model fit		Likelihood ratio test		
	logLike	AIC	χ^2	df	p
SEOM	-156047	312135			
IEAM	-156047	312136	0.76	1	.385
		Fixed ef	fects	I	
	b	SE	95% CI	t	p
Intercept	617.40	71.51	[477.28, 757.58]	8.64	<.001
WPrev	-64.30	9.90	[-83.70, -44.90]	-6.50	<.001
Log_Frq	-35.18	4.67	[-44.34, -26.02]	-7.53	<.001
Log_abs_tok_MBOF	26.33	7.42	[11.80, 40.86]	3.55	<.001
Log_abs_tok_MTOF	-2.81	3.64	[-9.95, 4.33]	-0.77	.441
Num_letters	3.85	1.63	[0.66, 7.03]	2.37	.019
N	0.10	0.47	[-0.83, 1.02]	0.20	.839
NLD	-37.78	9.28	[-55.97, -19.59]	-4.07	<.001
Fam	-15.67	3.10	[-21.73, -9.60]	-5.06	<.001
AoA	4.66	1.72	[1.29, 8.02]	2.71	.007
Conc	3.53	2.69	[-1.74, 8.81]	1.31	.191
Val	-2.65	1.75	[-6.08, 0.79]	-1.51	.132
Aro	-3.43	2.34	[-8.01, 1.14]	-1.47	.143
Dict_Sen	-0.48	0.48	[-1.43, 0.47]	-0.98	.326
Trial	-0.05	0.00	[-0.05, -0.04]	-12.82	<.001

PrevError	13.97	2.50	[9.08, 18.87]	5.60	< .001					
PEUBI-TR	0.00	1.37	[-2.68, 2.67]	0.00	1.000					
Random effects										
	Variance	SD								
Intercept Items	1295	35.98	-							
Intercept Subjects	5236	72.36	-							
Residual	10252	101.25	-							
Model fit										
	Marginal	Conditional								
R ²	13.96%	47.44%	-							

Note. SEOM = simple effects only model; IEAM = interactive effects added model; WPrev = word prevalence (in z scores); Log_Frq = word frequency (in logarithmic scale); Log_abs_tok_MBOF = bigram frequency (in logarithmic scale); Log_abs_tok_MTOF = trigram frequency (in logarithmic scale); Num_letters = number of letters; N = orthographic neighbours; NLD = normalized Levenshtein distance between Spanish-Catalan translations; Fam = familiarity; AoA = Age of acquisition; Conc = concreteness; Val = emotional valence; Aro = emotional arousal; Dict_Sen = dictionary senses; Trial = trial order; PrevError = Correct/Incorrect response in the preceding trial; PEUBI-TR = traditional religion.

LMEM comparison and final selection (PEUBI-ELF as EUB score, interaction with Valence)

		Model com	parison		
Model	Model fit		Likelihood ratio test		
	logLike	AIC	χ^2	df	p
SEOM	-156047	312135			
IEAM	-156047	312136	.52	1	.472
	1	Fixed ef	fects	I	
	b	SE	95% CI	t	p
Intercept	626.00	73.33	[482.26, 769.73]	8.54	<.001
WPrev	-64.30	9.90	[-83.70, -44.90]	-6.50	<.001
Log_Frq	-35.18	4.67	[-44.34, -26.02]	-7.53	<.001
Log_abs_tok_MBOF	26.33	7.42	[11.80, 40.86]	3.55	<.001
Log_abs_tok_MTOF	-2.81	3.64	[-9.95, 4.33]	-0.77	.441
Num_letters	3.85	1.63	[0.66, 7.03]	2.37	.019
Ν	0.10	0.47	[-0.83, 1.02]	0.20	.839
NLD	-37.78	9.28	[-55.97, -19.59]	-4.07	<.001
Fam	-15.67	3.10	[-21.73, -9.60]	-5.06	<.001
AoA	4.66	1.72	[1.29, 8.02]	2.71	.007
Conc	3.53	2.69	[-1.74, 8.81]	1.31	.191
Val	-2.65	1.75	[-6.08, 0.79]	-1.51	.132
Aro	-3.43	2.34	[-8.01, 1.14]	-1.47	.143
Dict_Sen	-0.48	0.48	[-1.43, 0.47]	-0.98	.326
Trial	-0.05	0.00	[-0.05, -0.04]	-12.82	<.001

PrevError	13.97	2.50	[9.08, 18.87]	5.60	< .001
PEUBI-ELF	-0.85	2.21	[-5.17, 3.48]	-0.39	.701
		Random eff	ects		
	Variance	SD			
	,	~2			
Intercept Items	1295	35.98			
intercept items	1275	55.70			
Intercept Subjects	5228	72.31	-		
intercept Subjects	5220	72.31			
Residual	10252	101.25			
Kesiduai	10232	101.23			
		M. 1.1.6	4		
		Model fi	ι		
	Marginal	Conditional			
\mathbb{R}^2	14.00%	47.44%			

Note. SEOM = simple effects only model; IEAM = interactive effects added model; WPrev = word prevalence (in z scores); Log_Frq = word frequency (in logarithmic scale); Log_abs_tok_MBOF = bigram frequency (in logarithmic scale); Log_abs_tok_MTOF = trigram frequency (in logarithmic scale); Num_letters = number of letters; N = orthographic neighbours; NLD = normalized Levenshtein distance between Spanish-Catalan translations; Fam = familiarity; AoA = Age of acquisition; Conc = concreteness; Val = emotional valence; Aro = emotional arousal; Dict_Sen = dictionary senses; Trial = trial order; PrevError = Correct/Incorrect response in the preceding trial; PEUBI-ELF = extraordinary life forms.

LMEM comparison and final selection (PEUBI-CT as EUB score, interaction with Valence)

		Model com	parison		
Model	Model fit		Likelihood ratio test		
	logLike	AIC	χ^2	df	p
SEOM	-156046	312133			
IEAM	-156046	312133	1.12	1	.289
		Fixed ef	fects	I	
	b	SE	95% CI	t	p
Intercept	672.30	79.12	[517.26, 827.39]	8.50	<.001
WPrev	-64.30	9.90	[-83.70, -44.90]	-6.50	<.001
Log_Frq	-35.18	4.67	[-44.34, -26.02]	-7.53	<.001
Log_abs_tok_MBOF	26.33	7.42	[11.80, 40.86]	3.55	<.001
Log_abs_tok_MTOF	-2.81	3.64	[-9.95, 4.33]	-0.77	.441
Num_letters	3.85	1.63	[0.66, 7.03]	2.37	.019
Ν	0.10	0.47	[-0.83, 1.02]	0.20	.839
NLD	-37.78	9.28	[-55.97, -19.59]	-4.07	<.001
Fam	-15.67	3.10	[-21.73, -9.60]	-5.06	<.001
AoA	4.66	1.72	[1.29, 8.02]	2.71	.007
Conc	3.53	2.69	[-1.74, 8.81]	1.31	.191
Val	-2.65	1.75	[-6.08, 0.79]	-1.51	.132
Aro	-3.43	2.34	[-8.01, 1.14]	-1.47	.143
Dict_Sen	-0.48	0.48	[-1.43, 0.47]	-0.98	.326
Trial	-0.05	0.00	[-0.05, -0.04]	-12.82	<.001

PrevError	13.97	2.50	[9.08, 18.86]	5.60	< .001
PEUBI-CT	-3.00	2.03	[-6.98, 0.98]	-1.48	.143
		Random eff	fects		
	Variance	SD			
Intercept Items	1295	35.98			
Intercept Subjects	5116	71.52			
Residual	10252	101.25			
	- 1	Model fi	it		
	Marginal	Conditional			
\mathbb{R}^2	14.60%	47.46%			

Note. SEOM = simple effects only model; IEAM = interactive effects added model; WPrev = word prevalence (in z scores); Log_Frq = word frequency (in logarithmic scale); Log_abs_tok_MBOF = bigram frequency (in logarithmic scale); Log_abs_tok_MTOF = trigram frequency (in logarithmic scale); Num_letters = number of letters; N = orthographic neighbours; NLD = normalized Levenshtein distance between Spanish-Catalan translations; Fam = familiarity; AoA = Age of acquisition; Conc = concreteness; Val = emotional valence; Aro = emotional arousal; Dict_Sen = dictionary senses; Trial = trial order; PrevError = Correct/Incorrect response in the preceding trial; PEUBI-CT = conspiracy theories.

LMEM comparison and final selection (PSEUDO-R as EUB score, interaction with Valence)

		Model com	parison		
Model	Model fit		Likelihood ratio test		
	logLike	AIC	χ ²	df	p
SEOM	-156047	312135			
IEAM	-156042	312127	9.83	1	.002
		Fixed ef	fects	1	
	b	SE	95% CI	t	р
Intercept	535.30	96.06	[347.01, 723.57]	5.57	<.001
WPrev	-64.34	9.91	[-83.76, -44.93]	-6.50	<.001
Log_Frq	-35.19	4.68	[-44.35, -26.02]	-7.53	<.001
Log_abs_tok_MBOF	26.35	7.42	[11.80, 40.89]	3.55	<.001
Log_abs_tok_MTOF	-2.82	3.65	[-9.96, 4.33]	-0.77	.441
Num_letters	3.85	1.63	[0.66, 7.04]	2.36	.019
Ν	0.10	0.47	[-0.83, 1.02]	0.20	.839
NLD	-37.80	9.29	[-56.00, -19.59]	-4.07	<.001
Fam	-15.68	3.10	[-21.75, -9.60]	-5.06	<.001
AoA	4.65	1.72	[1.29, 8.02]	2.71	.007
Conc	3.53	2.69	[-1.75, 8.81]	1.31	.192
Val	8.09	3.85	[0.55, 15.63]	2.10	.035
Aro	-3.43	2.34	[-8.01, 1.15]	-1.47	.144
Dict_Sen	-0.48	0.48	[-1.43, 0.47]	-0.99	.325
Trial	-0.05	0.00	[-0.05, -0.04]	-12.79	<.001

PrevError	13.96	2.50	[9.07, 18.85]	5.59	<.001
PSEUDO-R	1.48	1.18	[-0.84, 3.79]	1.25	.215
Val x PSEUDO-R	-0.19	0.06	[-0.31, -0.07]	-3.14	.002
		Random eff	fects		I
	Variance	SD			
Intercept Items	1297	36.01	_		
Intercept Subjects	5228	72.30	-		
Residual	10248	101.23	-		
		Model fi	it		
	Marginal	Conditional			
R ²	14.02%	47.46%	-		

Note. SEOM = simple effects only model; IEAM = interactive effects added model; WPrev = word prevalence (in z scores); Log_Frq = word frequency (in logarithmic scale); Log_abs_tok_MBOF = bigram frequency (in logarithmic scale); Log_abs_tok_MTOF = trigram frequency (in logarithmic scale); Num_letters = number of letters; N = orthographic neighbours; NLD = normalized Levenshtein distance between Spanish-Catalan translations; Fam = familiarity; AoA = Age of acquisition; Conc = concreteness; Val = emotional valence; Aro = emotional arousal; Dict_Sen = dictionary senses; Trial = trial order; PrevError = Correct/Incorrect response in the preceding trial; PSEUDO-R = pseudoscience.

LMEM comparison and final selection (PEUBI-S as EUB score, interaction with Arousal)

		Model com	parison		
Model	Model fit		Likelihood ratio test		
	logLike	AIC	χ^2	df	р
SEOM	-156047	312134			
IEAM	-156044	312131	4.70	1	.030
		Fixed eff	fects	1	
	b	SE	95% CI	t	р
Intercept	655.60	72.93	[512.62, 798.50]	8.99	<.001
WPrev	-64.29	9.90	[-83.69, -44.88]	-6.49	<.001
Log_Frq	-35.18	4.67	[-44.34, -26.02]	-7.53	<.001
Log_abs_tok_MBOF	26.33	7.42	[11.80, 40.87]	3.55	<.001
Log_abs_tok_MTOF	-2.81	3.64	[-9.95, 4.33]	-0.77	.441
Num_letters	3.85	1.63	[0.66, 7.03]	2.37	.019
Ν	0.10	0.47	[-0.83, 1.02]	0.21	.838
NLD	-37.79	9.28	[-55.98, -19.59]	-4.07	<.001
Fam	-15.66	3.10	[-21.73, -9.59]	-5.06	<.001
AoA	4.66	1.72	[1.29, 8.02]	2.71	.007
Conc	3.53	2.69	[-1.74, 8.81]	1.31	.191
Val	-2.65	1.75	[-6.08, 0.79]	-1.51	.132
Aro	-6.62	2.76	[-12.03, -1.21]	-2.40	.017
Dict_Sen	-0.48	0.48	[-1.43, 0.47]	-0.99	.325
Trial	-0.05	0.00	[-0.05, -0.04]	-12.83	<.001

13.94 -2.46 0.20	2.50 1.35	[9.05, 18.83]	5.59	<.001
	1.35	[-5.11, 0.20]	-1.82	072
0.20			1.02	.072
	0.09	[0.02, 0.39]	2.17	.030
	Random ef	fects		
Variance	SD			
1295	35.98	-		
5171	71.91	-		
10250	101.24	-		
	Model f	it		
Marginal	Conditional			
14.30%	47.45%	-		
	1295 5171 10250 Marginal	Variance SD 1295 35.98 5171 71.91 10250 101.24 Model fr Marginal Conditional	1295 35.98 5171 71.91 10250 101.24 Model fit Marginal Conditional	VarianceSD129535.98517171.9110250101.24Model fitModel fit

Note. SEOM = simple effects only model; IEAM = interactive effects added model; WPrev = word prevalence (in z scores); Log_Frq = word frequency (in logarithmic scale); Log_abs_tok_MBOF = bigram frequency (in logarithmic scale); Log_abs_tok_MTOF = trigram frequency (in logarithmic scale); Num_letters = number of letters; N = orthographic neighbours; NLD = normalized Levenshtein distance between Spanish-Catalan translations; Fam = familiarity; AoA = Age of acquisition; Conc = concreteness; Val = emotional valence; Aro = emotional arousal; Dict_Sen = dictionary senses; Trial = trial order; PrevError = Correct/Incorrect response in the preceding trial; PEUBI-S = superstitions.

LMEM comparison and final selection (PEUBI-OP as EUB score, interaction with Arousal)

		Model com	parison		
Model	Model fit		Likelihood ratio test		
	logLike	AIC	χ^2	df	p
SEOM	-156047	312135			
IEAM	-156044	312130	6.51	1	.011
		Fixed ef	fects	I	
	b	SE	95% CI	t	p
Intercept	657.30	76.03	[508.26, 806.28]	8.65	<.001
WPrev	-64.28	9.90	[-83.69, -44.88]	-6.49	<.001
Log_Frq	-35.17	4.67	[-44.33, -26.01]	-7.53	<.001
Log_abs_tok_MBOF	26.32	7.42	[11.79, 40.86]	3.55	<.001
Log_abs_tok_MTOF	-2.81	3.64	[-9.95, 4.33]	-0.77	.442
Num_letters	3.84	1.63	[0.66, 7.03]	2.36	.019
Ν	0.10	0.47	[-0.83, 1.02]	0.21	.838
NLD	-37.78	9.28	[-55.97, -19.59]	-4.07	<.001
Fam	-15.67	3.10	[-21.73, -9.60]	-5.06	<.001
AoA	4.66	1.72	[1.29, 8.02]	2.71	.007
Conc	3.54	2.69	[-1.74, 8.82]	1.31	.190
Val	-2.65	1.75	[-6.09, 0.78]	-1.51	.131
Aro	-8.77	3.13	[-14.91, -2.62]	-2.80	.005
Dict_Sen	-0.48	0.48	[-1.43, 0.47]	-0.99	.325
Trial	-0.05	0.00	[-0.05, -0.04]	-12.81	<.001

PrevError	13.92	2.50	[9.03, 18.81]	5.58	< .001
PEUBI-OP	-1.36	1.03	[-3.37, 0.65]	-1.33	.186
PEUBI-OP:Arousal	0.18	0.07	[0.04, 0.32]	2.55	.011
		Random eff	fects		
	Variance	SD			
Intercept Items	1295	35.99	-		
Intercept Subjects	5226	72.29	-		
Residual	10250	101.24	-		
		Model fi	it		
	Marginal	Conditional			
R ²	14.02%	47.46%	-		

Note. SEOM = simple effects only model; IEAM = interactive effects added model; WPrev = word prevalence (in z scores); Log_Frq = word frequency (in logarithmic scale); Log_abs_tok_MBOF = bigram frequency (in logarithmic scale); Log_abs_tok_MTOF = trigram frequency (in logarithmic scale); Num_letters = number of letters; N = orthographic neighbours; NLD = normalized Levenshtein distance between Spanish-Catalan translations; Fam = familiarity; AoA = Age of acquisition; Conc = concreteness; Val = emotional valence; Aro = emotional arousal; Dict_Sen = dictionary senses; Trial = trial order; PrevError = Correct/Incorrect response in the preceding trial; PEUBI-OP = occultism and pseudoscience.

LMEM comparison and final selection (PEUBI-TR as EUB score, interaction with Arousal)

		Model com	parison		
Model	Model fit		Likelihood ratio test		
	logLike	AIC	χ^2	df	p
SEOM	-156047	312135			
IEAM	-156047	312136	.69	1	.405
	L	Fixed ef	fects		
	b	SE	95% CI	t	p
Intercept	617.40	71.51	[477.28, 757.58]	8.64	<.001
WPrev	-64.30	9.90	[-83.70, -44.90]	-6.50	<.001
Log_Frq	-35.18	4.67	[-44.34, -26.02]	-7.53	<.001
Log_abs_tok_MBOF	26.33	7.42	[11.80, 40.86]	3.55	<.001
Log_abs_tok_MTOF	-2.81	3.64	[-9.95, 4.33]	-0.77	.441
Num_letters	3.85	1.63	[0.66, 7.03]	2.37	.019
Ν	0.10	0.47	[-0.83, 1.02]	0.20	.839
NLD	-37.78	9.28	[-55.97, -19.59]	-4.07	<.001
Fam	-15.67	3.10	[-21.73, -9.60]	-5.06	<.001
AoA	4.66	1.72	[1.29, 8.02]	2.71	.007
Conc	3.53	2.69	[-1.74, 8.81]	1.31	.191
Val	-2.65	1.75	[-6.08, 0.79]	-1.51	.132
Aro	-3.43	2.34	[-8.01, 1.14]	-1.47	.143
Dict_Sen	-0.48	0.48	[-1.43, 0.47]	-0.98	.326
Trial	-0.05	0.00	[-0.05, -0.04]	-12.82	<.001

PrevError	13.97	2.50	[9.08, 18.87]	5.60	<.001
	10.77	2.30	[5.00, 10.07]	5.00	<
PEUBI-TR	0.00	1.37	[-2.68, 2.67]	0.00	.998
		Random eff	fects		
	Variance	SD			
Intercept Items	1295	35.98	-		
Intercept Subjects	5236	72.36	_		
intercept Subjects	5250	72.30			
Residual	10252	101.25			
		Model fi	t		
	Marginal	Conditional			
R ²	13.96%	47.44%	-		

Note. SEOM = simple effects only model; IEAM = interactive effects added model; WPrev = word prevalence (in z scores); Log_Frq = word frequency (in logarithmic scale); Log_abs_tok_MBOF = bigram frequency (in logarithmic scale); Log_abs_tok_MTOF = trigram frequency (in logarithmic scale); Num_letters = number of letters; N = orthographic neighbours; NLD = normalized Levenshtein distance between Spanish-Catalan translations; Fam = familiarity; AoA = Age of acquisition; Conc = concreteness; Val = emotional valence; Aro = emotional arousal; Dict_Sen = dictionary senses; Trial = trial order; PrevError = Correct/Incorrect response in the preceding trial; PEUBI-TR = traditional religion.

LMEM comparison and final selection (PEUBI-ELF as EUB score, interaction with Arousal)

		Model com	parison		
Model	Model fit		Likelihood ratio test		
	logLike	AIC	χ^2	df	p
SEOM	-156047	312135			
IEAM	-156046	312134	2.86	1	.091
	L	Fixed eff	fects	1	
	b	SE	95% CI	t	p
Intercept	626.00	73.33	[482.26, 769.73]	8.54	<.001
WPrev	-64.30	9.90	[-83.70, -44.90]	-6.50	<.001
Log_Frq	-35.18	4.67	[-44.34, -26.02]	-7.53	<.001
Log_abs_tok_MBOF	26.33	7.42	[11.80, 40.86]	3.55	<.001
Log_abs_tok_MTOF	-2.81	3.64	[-9.95, 4.33]	-0.77	.441
Num_letters	3.85	1.63	[0.66, 7.03]	2.37	.019
Ν	0.10	0.47	[-0.83, 1.02]	0.20	.839
NLD	-37.78	9.28	[-55.97, -19.59]	-4.07	<.001
Fam	-15.67	3.10	[-21.73, -9.60]	-5.06	<.001
AoA	4.66	1.72	[1.29, 8.02]	2.71	.007
Conc	3.53	2.69	[-1.74, 8.81]	1.31	.191
Val	-2.65	1.75	[-6.08, 0.79]	-1.51	.132
Aro	-3.43	2.34	[-8.01, 1.14]	-1.47	.143
Dict_Sen	-0.48	0.48	[-1.43, 0.47]	-0.98	.326
Trial	-0.05	0.00	[-0.05, -0.04]	-12.82	<.001

PrevError	13.97	2.50	[9.08, 18.87]	5.60	<.001
PEUBI-ELF	-0.85	2.21	[-5.17, 3.48]	-0.39	.701
		Random effe	ects		
	Variance	SD			
Intercept Items	1295	35.98	-		
Intercept Subjects	5228	72.31			
Residual	10252	101.25			
	·	Model fit	t		
	Marginal	Conditional			
R ²	14.00%	47.44%			

Note. SEOM = simple effects only model; IEAM = interactive effects added model; WPrev = word prevalence (in z scores); Log_Frq = word frequency (in logarithmic scale); Log_abs_tok_MBOF = bigram frequency (in logarithmic scale); Log_abs_tok_MTOF = trigram frequency (in logarithmic scale); Num_letters = number of letters; N = orthographic neighbours; NLD = normalized Levenshtein distance between Spanish-Catalan translations; Fam = familiarity; AoA = Age of acquisition; Conc = concreteness; Val = emotional valence; Aro = emotional arousal; Dict_Sen = dictionary senses; Trial = trial order; PrevError = Correct/Incorrect response in the preceding trial; PEUBI-ELF = extraordinary life forms.

LMEM comparison and final selection (PEUBI-CT as EUB score, interaction with Arousal)

		Model com	parison		
Model	Model fit		Likelihood ratio test		
	logLike	AIC	χ^2	df	p
SEOM	-156046	312133			
IEAM	-156046	312133	1.07	1	.302
		Fixed ef	fects	I	
	b	SE	95% CI	t	p
Intercept	672.30	79.12	[517.26, 827.39]	8.50	<.001
WPrev	-64.30	9.90	[-83.70, -44.90]	-6.50	<.001
Log_Frq	-35.18	4.67	[-44.34, -26.02]	-7.53	<.001
Log_abs_tok_MBOF	26.33	7.42	[11.80, 40.86]	3.55	<.001
Log_abs_tok_MTOF	-2.81	3.64	[-9.95, 4.33]	-0.77	.441
Num_letters	3.85	1.63	[0.66, 7.03]	2.37	.019
Ν	0.10	0.47	[-0.83, 1.02]	0.20	.839
NLD	-37.78	9.28	[-55.97, -19.59]	-4.07	<.001
Fam	-15.67	3.10	[-21.73, -9.60]	-5.06	<.001
AoA	4.66	1.72	[1.29, 8.02]	2.71	.007
Conc	3.53	2.69	[-1.74, 8.81]	1.31	.191
Val	-2.65	1.75	[-6.08, 0.79]	-1.51	.132
Aro	-3.43	2.34	[-8.01, 1.14]	-1.47	.143
Dict_Sen	-0.48	0.48	[-1.43, 0.47]	-0.98	.326
Trial	-0.05	0.00	[-0.05, -0.04]	-12.82	<.001

PrevError	13.97	2.50	[9.08, 18.86]	5.60	<.001
FIEVENDI	13.97	2.30	[9.06, 16.60]	5.00	< .001
PEUBI-CT	-3.00	2.03	[-6.98, 0.98]	-1.48	.143
I LODI-CI	-3.00	2.03	[-0.98, 0.98]	-1.40	.145
		Random eff	fects		
	Variance	SD			
Intercept Items	1295	35.98	-		
Intercept Items	1293	33.76			
Intercept Subjects	5116	71.52			
Residual	10252	101.25			
		Model fi	it		
	Marginal	Conditional			
R ²	14.60%	47.46%	-		

Note. SEOM = simple effects only model; IEAM = interactive effects added model; WPrev = word prevalence (in z scores); Log_Frq = word frequency (in logarithmic scale); Log_abs_tok_MBOF = bigram frequency (in logarithmic scale); Log_abs_tok_MTOF = trigram frequency (in logarithmic scale); Num_letters = number of letters; N = orthographic neighbours; NLD = normalized Levenshtein distance between Spanish-Catalan translations; Fam = familiarity; AoA = Age of acquisition; Conc = concreteness; Val = emotional valence; Aro = emotional arousal; Dict_Sen = dictionary senses; Trial = trial order; PrevError = Correct/Incorrect response in the preceding trial; PEUBI-CT = conspiracy theories.

LMEM comparison and final selection (PSEUDO-R as EUB score, interaction with Arousal)

		Model com	parison		
Model	Model fit		LRT		
	logLike	AIC	χ^2	df	p
SEOM	-156047	312135			
IEAM	-156043	312129	7.65	1	.006
	1	Fixed ef	fects	1	I
	b	SE	95% CI	t	p
Intercept	661.90	97.63	[470.55, 853.24]	6.78	< .001
WPrev	-64.30	9.90	[-83.71, -44.90]	-6.49	< .001
Log_Frq	-35.18	4.67	[-44.34, -26.02]	-7.53	< .001
Log_abs_tok_MBOF	26.33	7.42	[11.79, 40.86]	3.55	< .001
Log_abs_tok_MTOF	-2.80	3.64	[-9.94, 4.34]	-0.77	.442
Num_letters	3.84	1.63	[0.65, 7.03]	2.36	.019
N	0.09	0.47	[-0.83, 1.02]	0.20	.840
NLD	-37.77	9.28	[-55.96, -19.58]	-4.07	< .001
Fam	-15.66	3.10	[-21.73, -9.59]	-5.06	<.001
AoA	4.66	1.72	[1.29, 8.02]	2.71	.007
Conc	3.54	2.69	[-1.74, 8.82]	1.32	.190
Val	-2.66	1.75	[-6.09, 0.78]	-1.52	.131
Aro	-16.53	5.28	[-26.88, -6.18]	-3.13	.002
Dict_Sen	-0.48	0.48	[-1.43, 0.47]	-0.98	.326
Trial	-0.05	0.00	[-0.05, -0.04]	-12.82	<.001

PrevError	13.96	2.50	[9.07, 18.85]	5.59	< .001
PSEUDO-R	-0.80	1.22	[-3.20, 1.60]	-0.65	.515
PSEUDO-R:Arousal	0.24	0.09	[0.07, 0.40]	2.77	.006
		Random ef	fects		
	Variance	SD			
Intercept Items	1295	35.99	-		
Intercept Subjects	5228	72.30	-		
Residual	10249	101.24	-		
	<u> </u>	Model f	it		
	Marginal	Conditional			
R ²	14.01%	47.45%	-		

Note. SEOM = simple effects only model; IEAM = interactive effects added model; WPrev = word prevalence (in z scores); Log_Frq = word frequency (in logarithmic scale); Log_abs_tok_MBOF = bigram frequency (in logarithmic scale); Log_abs_tok_MTOF = trigram frequency (in logarithmic scale); Num_letters = number of letters; N = orthographic neighbours; NLD = normalized Levenshtein distance between Spanish-Catalan translations; Fam = familiarity; AoA = Age of acquisition; Conc = concreteness; Val = emotional valence; Aro = emotional arousal; Dict_Sen = dictionary senses; Trial = trial order; PrevError = Correct/Incorrect response in the preceding trial; PSEUDO-R = pseudoscience.