

These tables are the results of analysis based on a more rigorous match of variables between the groups.

Table 1. Means (standard deviations) of participant characteristics in language history, language proficiency, and language experience etc. across groups.

	Monolingual n=32	L1 Speaking n=20	Bilingual n=26	L2 Speaking n=28
<i>General Background</i>				
Raven's Matrices	65.2 (5.5)	65.9 (5.6)	65.6 (3.8)	65.0 (5.0)
Age	21.5 (3.6)	20.3 (0.7)	21.5 (0.8)	20.2 (2.3)
Education (years)	11.3 ^a (2.4)	14.5 ^b (0.6)	15.5 ^b (0.7)	15.2 ^b (2.3)
L2 Learning History (years)	4.1 ^a (1.2)	10.9 ^b (1.3)	11.5 ^b (0.6)	11.2 ^b (2.3)
<i>Bilingualism: L2 Proficiency</i>				
L2 Verbal Category Fluency	6.7 ^a (1.7)	17.5 ^b (7.5)	24.5 ^c (4.4)	25.2 ^c (5.2)
Self-rated L2 Proficiency	7.1 ^a (2.9)	18.3 ^b (4.8)	23.7 ^c (4.1)	24.5 ^c (4.3)
Self-rated L2 Exposure (%)	0.0	7.5 ^a (3.1)	45.2 ^b (16.0)	41.1 ^b (20.8)
Self-rated L2 Speaking (%)	0.0	9.1 ^a (9.3)	17.1 ^b (8.5)	27.2 ^c (13.4)
<i>Public Speaking</i>				
L2 /L1 public speaking (years)	0.0	2.9 (0.3)	0.0	2.8 (0.9)

Note: Means in the same row with different superscript letters differ from each other significantly at $p < .05$.

The total language exposure and speaking percentage of L1 and L2 equals 100; the total score for L2 proficiency is 40.

Table 2. Means (standard deviations) of reaction times in each Flanker condition, means (standard deviations) of Flanker conflict in each group, multiple comparisons (*p* value) of the groups in each Flanker condition.

	Monolingual (M) n=32	L1 Speaking (L1) n=20	Bilingual (B) n=26	L2 Speaking (L2) n=28		
Congruent	530.3(106.4)	472.8(78.5)	531.0 (89.4)	464.5 (55.5)		
Neutral	549.3 (90.8)	499.3(86.1)	544.3 (102.1)	479.5 (47.5)		
Incongruent	589.7 (88.3)	535.4(67.9)	594.6 (93.6)	523.3 (56.4)		
Conflict*	59.4 (39.7)	62.5(30.6)	63.7 (41.4)	58.8 (23.6)		
	L2-B**	L2-M	L1-B	L1-M	L2-L1	B-M
Congruent	<i>p</i> = .005	<i>p</i> = .004	<i>p</i> = .025	<i>p</i> = .021	<i>p</i> = .741	<i>p</i> = .973
Neutral	<i>p</i> = .005	<i>p</i> = .002	<i>p</i> = .074	<i>p</i> = .039	<i>p</i> = .421	<i>p</i> = .821
Incongruent	<i>p</i> = .001	<i>p</i> = .002	<i>p</i> = .013	<i>p</i> = .017	<i>p</i> = .601	<i>p</i> = .812
Conflict*	<i>p</i> = .607	<i>p</i> = .945	<i>p</i> = .914	<i>p</i> = .752	<i>p</i> = .712	<i>p</i> = .644

Notes: *Conflict refers to the different response times between incongruent condition and congruent condition. **Abbreviations: “M” for monolingual group, “L1” for L1 public speaking group, “B” for bilingual group, “L2” for L2 public speaking group; “L2-B” for a comparison between the L2 public speaking group and the bilingual group.

Table 3. Means (standard deviations) of reaction times in each number Stroop condition, means (standard deviations) of Stroop conflict in each group, multiple comparisons (*p* value) of the groups in each Stroop condition.

	Monolingual (M)	L1 Speaking (L1)	Bilingual (B)	L2 Speaking (L2)		
	n=31	n=17	n=25	n=25		
Congruent	693.2 (100.0)	688.7 (78.9)	702.1 (103.8)	646.3 (86.0)		
Neutral	721.8 (119.3)	717.1 (87.8)	750.0 (115.8)	663.6 (59.2)		
Incongruent	712.5 (95.2)	731.3 (108.3)	732.5 (97.3)	674.2 (82.2)		
Conflict*	19.3 (50.7)	42.6 (62.0)	30.4 (63.2)	27.9 (45.0)		
	L2-B**	L2-M	L1-B	L1-M	L2-L1	B-M
Congruent	<i>p</i> = .039	<i>p</i> = .068	<i>p</i> = .651	<i>p</i> = .875	<i>p</i> = .156	<i>p</i> = .725
Neutral	<i>p</i> = .003	<i>p</i> = .035	<i>p</i> = .301	<i>p</i> = .878	<i>p</i> = .095	<i>p</i> = .299
Incongruent	<i>p</i> = .003	<i>p</i> = .018	<i>p</i> = .966	<i>p</i> = .492	<i>p</i> = .008	<i>p</i> = .412
Conflict*	<i>p</i> = .873	<i>p</i> = .565	<i>p</i> = .480	<i>p</i> = .164	<i>p</i> = .396	<i>p</i> = .457

Notes: * Conflict refers to the different response times between incongruent condition and congruent condition. ** Abbreviations: “M” for monolingual group, “L1” for L1 public speaking group, “B” for bilingual group, “L2” for L2 public speaking group; “L2-B” for a comparison between the L2 public speaking group and the bilingual group.

Table 4. Means (standard deviations) of global performance and types of errors in the WCST across groups, multiple comparisons (*p* value) of the groups in each index.

	Monolingual (M)	L1 Speaking (L1)		Bilingual (B)		L2 Speaking (L2)
	n=32	n=20	n=20	n=26	n=26	n=30
Global RTs	1383.7(549.8)	1428.4(495.2)		1547.1 (602.7)		1347.4(429.7)
C-Categories*	5.7(2.8)	6.4(3.3)		9.4(3.6)		8.8(3.3)
Overall errors	73.2(13.4)	70.8(13.1)		56.7(13.9)		58.2(14.3)
Per-errors*	54.4(15.4)	50.0(14.0)		36.2(14.8)		37.7(16.1)
Pre-Cat-errors*	41.6(17.7)	30.2(12.6)		18.4(12.3)		20.3(15.7)
	L2-B**	L2-M	L1-B	L1-M	L2-L1	B-M
Global RTs	<i>p</i> = .157	<i>p</i> = .787	<i>p</i> = .447	<i>p</i> = .767	<i>p</i> = .593	<i>p</i> = .243
C-Categories*	<i>p</i> = .584	<i>p</i> = .000	<i>p</i> = .003	<i>p</i> = .445	<i>p</i> = .010	<i>p</i> = .000
Overall errors	<i>p</i> = .690	<i>p</i> = .000	<i>p</i> = .001	<i>p</i> = .544	<i>p</i> = .002	<i>p</i> = .000
Per-errors*	<i>p</i> = .712	<i>p</i> = .000	<i>p</i> = .003	<i>p</i> = .314	<i>p</i> = .006	<i>p</i> = .000
Pre-Cat-errors*	<i>p</i> = .628	<i>p</i> = .000	<i>p</i> = .009	<i>p</i> = .011	<i>p</i> = .024	<i>p</i> = .000

Notes: * “C-Categories” refers to completed categories, “Per-errors” perseverative errors; “Pre-Cat-errors” previous category errors. ** Abbreviations: “M” for monolingual group, “L1” for L1 public speaking group, “B” for bilingual group, “L2” for L2 public speaking group; “L2-B” for a comparison between the L2 public speaking group and the bilingual group.