

Table 2. P1 and N170 inversion effects for face stimuli

			Adults			
References	Subjects, N	Task	P1 Latency	P1 Amplitude	N170 Latency	N170 Amplitude
1	12	Mental counting irrelevant target (butterflies)	-	-	N*	N ^{NS} (R>L)
2	9	Passive viewing	N**	N**	N**	N***
3	14 (M=25 yrs)	Matching identity of target face to prime face	N ^{NS}	A	N**	N*** (R>L*)
4	14 (M=25 yrs)	Orientation-decision	-	-	N***	N***
5*	15 (18-30 yrs)	Exp1: Detecting hands	-	-	N*	N ^{NS} (R>L*)
		Exp2: Detecting face repetitions	-	-	N***	N***
6	11 (19-26 yrs)	Passive viewing	-	-	N*	N*
7†	16 (19-37 yrs)	Mental counting of irrelevant target (flowers)	-	-	N***	N (R>L*)
8	38 (M=28 yrs)	Press key to irrelevant target (checkerboard)	-	-	N^	N^
9	11 (19-42 yrs)	Passive viewing	-	-	N*	N** (R>L**)
10	34 (20-33 yrs)	Recognition memory for repeated faces	N***	A	N***	N***
11	18 (19-41 yrs)	Gender decision	-	N^	-	N^
12‡	13 (M=25 yrs)	Orientation-decision	A	-	N** (R<L''')	P ^{NS}
13	16 (21-33 yrs)	Press key to irrelevant target (checkerboard)	N**	N* (R>L**)	N***	N*
14	36 (20-33 yrs)	Recognition of repeated faces in study and test	N***	N***	N***	N***
15	24 (19-51 yrs)	Detection of human faces in scenes.	-	-	N***	N***
16	12 (18-26 yrs)	Orientation-decision	-	-	N**	N*
17	16 (18-39 yrs)	Press key to irrelevant target (butterfly)	-	-	-	N***
18	16 (18-27 yrs)	Matching identity to name celebrity	-	-	-	N***
19	11	Press key for gray fixation cross	-	-	N**	N*
			Infants and Children			
8	15 (4-5 yrs)	Press key to irrelevant target (checkerboard)	-	-	A^	P^
	15 (6-7 yrs)	Idem	-	-	P^	A^
	15 (8-9 yrs)	Idem	-	-	P^	P^
	15 (10-11 yrs)	Idem	-	-	A^	N^
	15 (12-13 yrs)	Idem	-	-	N^	N^
	15 (14-15 yrs)	Idem	-	-	N^	N^
20¥	25 (3 mths)	Passive viewing	-	-	A	A
9	17 (6 mths)	Passive viewing	-	-	A	A
20¥	26 (12 mths)	Passive viewing	-	-	A	N*
21*	16 (8-9 yrs)	Recognition memory for repeated faces	N^	N^	N^	A
	14 (10-11 yrs)	Idem	N^	N^	N^	A
	15 (12-13 yrs)	Idem	N^	N^	N^	N^
	13 (14-16 yrs)	Idem	N^	N^	N^	N^

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Legend

N=normal inversion (inverted > upright);

A=inversion absent (no difference inverted-upright);

P=Paradoxical inversion (upright > inverted); - = Not reported.

^ = Numerical difference but no P-value is mentioned for specific comparison;

* = $p < 0.05$; ** = $p < 0.01$; *** = $p < 0.001$; NS = $p > 0.05$.

R>L = A significant Orientation x Hemisphere interaction is reported: inversion larger on right hemisphere electrodes than left.

* Inversion effects were not significant when participants had to detect digits superimposed on faces.

† Results are shown for photographic stimuli (N170 amplitude comparison upright - inverted; $p = 0.055$)

‡ Results are shown for broadband stimuli. In contrast to the broadband condition,

in the high spatial frequency condition, normal inversion was found on the N170 amplitude ($P < 0.01$)

¥ The ERP analyzed (N290) is a face-sensitive component in infants which may relate to the adult N170.

• Normal inversion was found for P1 and N170 latency ($p < 0.001$) irrespective of age group;

The inversion effect on the N170 amplitude was near significance for age group 14-16.

When adults were included in these analyses, the interaction age x face-type became significant.