Supplemental Material S4. Effects of age at implantation and cognitive functioning with age as a discrete variable: Information provided by authors for cochlear implant (CI) users and calculated effect sizes.

Authors	***N***	***M* (*SD*) age (yrs) at implant**	***M* (*SD*) Age (yrs) at Test**	***M* (*SD*) Duration of Use (yrs)**	**Assessment/task**	***M* (*SD*)[a]**	**Statistical analyses**	**Primary finding**	**Effect size[a]**
					Theory of mind				
Most & Aviner (2009)	10, 10	3.92 (1.25), 11.33 (3.67)	13.75 (1.58), 15.08 (2.58)	9.58 (2.0), 3.67 (2.83)	Identifying emotions in spoken sentences: Auditory cues Visual cues Auditory+visual cues	21.63 (9.28), 15.97 (8.86) / 76.66 (10.06), 81.33 (8.09) / 74.66 (9.82), 79.33 (10.86)	Analysis of variance	Earlier implantation unrelated to performance in all three conditions	.30 .25 .22
Sundqvist et al. (2014)	8, 8	1.42 (.43), 3.38 (1.11)	6.57 (1.64), 7.05 (1.73)	5.10 (8.34), 3.67 (2.28)	Sally-Anne false belief Emotion recognition in stories	3.47 (3.56), 4.47 (2.03) / 1.74 (3.30), 2.14 (2.39)	Analysis of variance	Earlier implantation associated with better performance on both tasks	.25 .47
					Other cognitive processes				
Colletti et al. (2011)	19, 21, 33	6.4 (2.8), 19.3 (3.8), 30.1 (5.9)	5 -year follow-up		Griffiths Mental Development Scale: Locomotor Eye-hand coordination Performance subscales	101 (12), 91 (13), 88 (8)[a]	NR	Earliest implanted group outperformed other two groups on performance scale only	.37 .56[a,b,]
			10-year follow-up		Leiter: Figure-ground Form completion Sequential order Repeated patterns	NR	NR	Earliest-implanted group outperformed latest implanted group on form completion, sequential order, repeated patterns; and outperformed middle-implanted group on sequential order, repeated patterns	NC
					Historical knowledge	0.15 (0.15), 0.18 (0.14)	*t*-test	No difference between earlier-	.14

Convertino et al. (2014)	25, 65	2.56 (0.75), 10.45 (5.76)	College age	13.10 (5.25)	Famous people at	0.39 (0.15), 0.40 (0.20)	*t*-test	implanted in later-implanted groups but consistent trends favoring those implanted later	.03
					Geographical knowledge	0.74 (0.26), 0.72 (0.24)	*t*-test		.04
					Magnitude knowledge ± 10%	0.07 (0.06), 0.09 (0.08)	*t*-test		.13
					Magnitude estimation ± 10%	0.09 (0.07), 0.09 (0.08)	*t*-test		.00
López-Higes et al. (2015)	19, 19	1.22 (0.47), 3.49 (1.08)	9.69 (1.13), 9.88 (1.17)	NR	WISC-IV: Backward digit span	3.74 (0.93), 3.26 (0.93)	NR	NR	.25
					WISC-IV: Perceptual Reasoning index	111.05 (13.93, 104.16 (12.22)	NR	NR	.26

Note. NC = not calculable from information provided; NR = not reported; WISC-IV = Wechsler Intelligence Scale for Children–Fourth Edition.

[a]Multiple *M*s (*SD*s) listed correspond to the order of assessments/tasks; multiple effect sizes listed correspond to the order of primary findings.

[b]Means and effect sizes calculable for significant differences only

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