

CNV	Paper	Sample size	Instrument	Study Indicator
<b>3q29 deletion</b>	Russo-Sanchez et. al	32	DAS, WASI	a
	<b>7q11.23 deletion</b>			
	Binelli et. al	20	WAIS	b
	Brawn et. al	30	Woodcock Johnson	c
	Chiang et. al	41	WAIS	d
	Davies et. al	70	WAIS	e
	Del Cole et. al	22	WISC	f
	Dror et. al	80	WISC, WAIS	g
	Dunning et. al	44	Kaufman	h
	Elison et. al	92	WAIS	i
	Farran et. al	20	WASI	j
	Gerard-Desplanches et. al	39	WAIS, WISC, Kaufman	k
	Gregory et. al	20	Kaufman	l
	Hocking et. al	20	Woodcock Johnson	m
	Howlin et. al	62	WAIS	n
	Jackowski et. al	28	WISC, WAIS	o
	Klein-Tasman et. al	100	Kaufman	p
	Klein-Tasman et. al	84	Kaufman	q
	Ly et. al	21	Kaufman	r
	McGrath et. al	46	Kaufman	s
	Mervis et. al	76	DAS	t
	Ng et. al	20	WAIS	u
	Ng. et al	62	WAIS	v
	Perez-Garcia et. al	69	WISC	w
	Pitts et. al	292	Kaufman	x
	Plesa Skwerer et. al	29	Kaufman	y
	Porter et. al	55	Woodcock Johnson	z
	Pryweller et. al	29	Kaufman	aa
	Rossi et. al	26	WISC	ab
	Santos et. al	21	WISC, WAIS	ac
	Sauna-Aho et. al	25	WISC, WAIS	ad
	Searcy et. al	80	WISC, WAIS	ae
	Stinton et. al	92	WAIS	af
	Sullivan et. al	22	Kaufman, DAS	ag
	Tavano et. al	26	WISC	ah
	Van der fluit et. al	24	Kaufman	ai
	Wuang et. al	38	WISC	aj
	Zarchi et. al	24	WISC	ak

<b>15q11.2 deletion (AS)</b>	Grieco et. al	25	Bayley	al
	Peters et. al	20	Bayley	am
<b>15q11.2 deletion (PWS)</b>	Avrahamy et. al	53	WAIS, WISC	an
	Azor et. al	20	WAIS	ao
	Baker et. al	25	WISC, WAIS	ap
	Bruining et. al	88	WISC, WAIS	aq
	Chavalere et. al	30	WAIS	ar
	Chevalere et. al	20	WAIS	as
	Copet et. al	99	WAIS	at
	Curfs et. al	26	WISC	au
	Dimitropoulos et. al	35	WISC, WAIS	av
	Dimitropoulos et. al	39	WISC, WAIS	aw
	Dykens et. al	54	Kaufman	ax
	Dykens et. al	146	Kaufman	ay
	Dykens et. al	240	Kaufman	az
	Hartley et. al	65	WISC, WAIS	ba
	Holland et. al	65	WISC, WAIS	bb
	Kuppens et. al	25	WISC, WAIS	bc
	Lo et. al	69	WISC	bd
	Lo et. al	75	Bayley, WPPSI	be
	Lukoshe et. al	24	WISC	bf
	Ly et. al	20	Kaufman	bg
	Manning et. al	20	WAIS	bh
	Milner et. al	47	WAIS	bi
	Roof et. al	38	WISC, WAIS	bj
	Salles et. al	26	WAIS	bk
	Semenza et. al	23	WAIS	bl
	Shivers et. al	196	Kaufman	bm
	Shriki-Tal et. al	53	WAIS	bn
	Shu et. al	20	WISC, WAIS	bo
	Skokauskas et. al	24	Leiter	bp
	Whittington et. al	97	WISC, WAIS	bq
Zarcone et. al	73	WISC, WAIS	br	
	Blackmon et. al	30	WASI	bs
	Hanson et. al	21	WASI, DAS	bt
	Hippolyte et. al	62	WASI	bu

<b>16p11.2 deletion (proximal)</b>	Kim et. al	110	DAS	bv
	Moreno-de-luca et. al	56	WASI	bw
	Owen et. al	75	WASI	bx
<b>16p11.2 duplication (proximal)</b>	Blackmon et. al	25	WASI	bs
	Hippolyte et. al	44	WASI	bu
	Kim et. al	58	DAS	bv
	Owen et. al	71	WASI	bx
<b>17p11.2 deletion</b>	Greenberg et. al	27	WAIS	by
	Madduri et. al	57	WISC	bz
	Udwin et. al	40	WISC, WAIS	ca
<b>22q11.2 deletion</b>	Albert et. al	63	WISC	cb
	Angkustsiri et. al	100	WISC	cc
	Antshel et. al	84	WISC	cd
	Armando et. al	126	WISC	ce
	Badoud et. al	29	WISC, WAIS	cf
	Baker et. al	25	WISC, WAIS	cg
	Bostelmann et. al	71	WISC	ch
	Bruining et. al	90	WISC, WAIS	ci
	Butcher et. al	100	WAIS	cj
	Campbell et. al	24	WASI	ck
	Carmel et. al	92	WISC, WAIS	cl
	Chawner et. al	75	WASI	IQ scores not reported
	Cunningham et. al	70	WASI	cm
	De Smedt et. al	103	WISC	cn
De Sonnevile et. al	58	WISC, WAIS	co	

## 22q11.2 deletion

Debbane et. al	43	WISC, WAIS	cp
Dewulf et. al	37	WISC, WAIS	cq
Dufour et. al	58	WISC, WAIS	cr
Duijff et. al	69	WISC	cs
Eaton et. al	108	WASI	ct
Fabbro et. al	74	WISC, WAIS	cu
Fiksinski et. al	99	WAIS	cv
Francisco et. al	28	WISC, WAIS	cw
Franconi et. al	159	WPPSI, WISC, WAIS	cx
Frascarelli et. al.	51	WAIS	cy
Glaser et. al	26	WISC	cz
Gothelf et. al	79	WISC, WAIS	da
Heller et. al	51	WAIS	db
Hidding et. al	45	WISC	dc
Hooper et. al	42	WISC	dd
Hwang et. al	80	WISC, WASI	de
Jacobson et. al	31	WISC	df
Jensen et. al	66	WISC	IQ scores not reported
Kates et. al	41	WISC	dg
Kikinis et. al	56	WASI	dh
Klaassen et. al	171	WISC, WAIS	di
Kravariti et. al	29	WISC, WIAS	dj
Lewandowski et. al	26	WISC	dk
Lin et. al	106	WASI, WAIS	dl
Linton et. al	57	WASI, WISC	dm
McCabe et. al	70	WASI, WISC	dn
Momma et. al	34	WAIS	do
Monks et. al	83	WASI	dp
Mosheva et. al	260	WAIS, WISC	dq
Moss et. al	33	WISC	dr
Murphy et. al	50	Quick test	IQ scores not reported
Niklasson et. al	100	WISC, WASI	ds
Olszewski et. al	57	WAIS	dt
Ousley et. al	56	WISC, WAIS	du
Padula et. al	63	WISC, WAIS	dv
Pontillo et. al	75	WISC, WAIS	dw
Radoeva et. al	33	WISC, WAIS	dx
Raux et. al	92	WISC, WAIS	dy
Roizen et. al	40	WISC	dz
Schaer et. al	59	WISC	ea
Schneider et. al	47	WISC, WAIS	eb
Schoch et. al	74	WISC	ec
Schreiner et. al	26	WASI	ed
Scott et. al	69	WISC, WASI, Kaufman, Leiter	ee
Serur et. al	25	WISC	ef
Shashi et. al	22	WISC	eg

Sinderberry et. al	50	WISC	eh
Tylee et. al	56	WAIS	ei
Ua-areechit et. al	34	Bayley, WISC, WAIS	ej
Uljarovic et. al	38	WISC, WAIS	ek
Van Aken et. al	28	WISC, WPPSI	el
Van Amelsvoort et. al	26	WAIS	em
Van Den Heuvel et. al	21	WISC	en
Vangkilde et. al	29	RIST	eo
Weinberger et. al	117	WISC, WAIS	ep
Woodin et. al	81	WPPSI, WISC, WAIS	eq
Yuen et. al	103	WAIS	er
Zarchi et. al	39	WISC	es

**Abbreviations:**

DAS: Differential Ability Scales

RIST: Reynolds Intellectual Screening Test

WAIS: Wechsler Adult Intelligence Scale

WASI: Wechsler Abbreviated Scale of Intelligence

WISC: Wechsler Intelligence Scale for Children

WPPSI: Wechsler Preschool and Primary Scale of Intelligence

**Table S1. Sample sizes and cognitive instruments of CNV Papers.** Study indicator is matched to corresponding studies in Figures 2, S1, and S2.

Search Term(s)	Total # Pubmed search results	Total # unique search results*	Exclusion Criteria						Total # of eligible papers
			Cognitive ability scores not reported	Inadequate sample size	Nested samples	Non-human studies	No instruments reported	Unable to access paper	
“3q29 deletion and cognitive ability”	3	3	2	-	-	-	-	-	1
“3q29 deletion and IQ”	2	2	1	1	-	-	-	-	0
“7q11.23 deletion and cognitive ability”	19	19	5	9	1	1	-	-	3
“7q11.23 deletion and IQ”	10	8	2	3	-	1	-	-	2
“Williams Syndrome and IQ”	121	111	26	37	15	-	4	7	22

“15q11.2 deletion and cognitive ability”	4	4	1	-	1	1	1	-	0
“15q11.2 deletion and IQ”	6	6	3	1	2	-	-	-	0
“Prader-Willi syndrome and cognitive ability”	47	45	11	11	3	3	3	4	8
“Prader-Willi syndrome and IQ”	87	76	11	27	13	-	3	8	15
“Angelman syndrome and cognitive ability”	24	19	9	3	-	6	-	-	1
“Angelman syndrome and IQ”	10	3	1	-	-	-	2	-	1
“16p11.2 deletion and cognitive ability”	12	11	-	-	8	1	-	-	2
“16p11.2 deletion and IQ”	14	12	3	2	4	-	-	-	3
“16p11.2 duplication and cognitive ability”	7	0	-	-	-	-	-	-	0
“16p11.2 duplication and IQ”	8	0	-	-	-	-	-	-	0
“17p11.2 deletion and	1	1	1	-	-	-	-	-	0

cognitive ability”									
“17p11.2 deletion and IQ”	1	1	-	-	-	-	-	-	1
“Smith-Magenis Syndrome and Cognitive ability”	5	2	-	1	-	-	-	-	1
“Smith-Magenis Syndrome and IQ”	6	6	1	4	-	-	-	-	1
“22q11.2 deletion and cognitive ability”	54	52	9	9	14	1	1	1	17
“22q11.2 deletion and IQ”	102	85	6	8	33	-	5	2	31
“Velocardial facial syndrome and cognitive ability”	46	12	1	7	2	-	-	1	1
“Velocardial facial syndrome and IQ”	88	25	3	2	5	-	2	1	12

**Table S2. Search and exclusion criteria for cognitive ability literature search.** Only unique papers were counted.

\*Studies that were returned in previous search results are not counted