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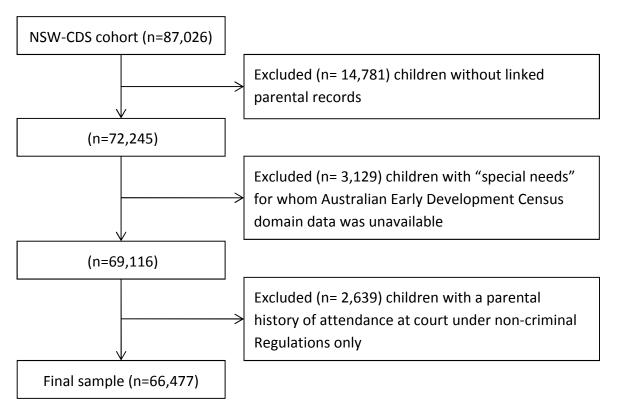
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Supplementary Fig. S1. Flow chart illustrating derivation of the final sample of 66,447 children and their parents.



Supplementary Table S1: Associations between *any* and *violent* offending histories (paternal, maternal, biparental) and vulnerability on the five Australian Early Development Census (AEDC) domains

			SOCIAL	Eľ	NOTIONAL	С	OGNITIVE	СОМ	MUNICATION	I	PHYSICAL
		(n=	5,549; 8.3%)	(n=	4,734; 7.1%)	(n=.	3,589; 5.4%)	(n=	5,480; 8.2%)	(n=	5,467; 8.2%)
		OR	(95% CI)								
Any Offending											
Paternal (<i>n=17,631; 26.5%</i>)	U	1.85	(1.74–1.96)	1.75	(1.65–1.87)	2.33	(2.17–2.50)	1.67	(1.57–1.77)	1.76	(1.66–1.87)
	А	1.68	(1.58–1.79)	1.57	(1.47–1.68)	2.00	(1.86–2.16)	1.59	(1.49–1.69)	1.58	(1.49–1.68)
Maternal (<i>n=5,775; 8.7%</i>)	U	2.43	(2.24–2.63)	2.29	(2.10-2.50)	3.56	(3.25-3.90)	2.26	(2.08-2.45)	2.53	(2.34-2.74)
	А	2.18	(2.00-2.38)	2.01	(1.83-2.21)	2.99	(2.71-3.29)	2.25	(2.05-2.45)	2.24	(2.05-2.43)
Biparental (<i>n=3,598; 5.4%</i>)	U	2.73	(2.48–3.00)	2.50	(2.25–2.77)	4.07	(3.66–4.52)	2.39	(2.16–2.63)	2.79	(2.53-3.06)
	А	2.44	(2.20-2.70)	2.15	(1.92–2.40)	3.45	(3.08–3.87)	2.45	(2.20-2.73)	2.42	(2.18-2.67)
Violent Offending											
Paternal (<i>n=6,853; 10.3%</i>)	U	2.36	(2.19–2.55)	2.11	(1.94–2.30)	3.14	(2.88–3.43)	2.08	(1.92–2.25)	2.23	(2.07–2.41)
	А	2.09	(1.92–2.26)	1.83	(1.68–2.00)	2.60	(2.37–2.86)	1.94	(1.78–2.11)	1.94	(1.78–2.10)
Maternal (<i>n=1,724; 2.6%</i>)	U	3.03	(2.67–3.45)	3.02	(2.64–3.46)	4.94	(4.31–5.65)	2.65	(2.32–3.03)	2.86	(2.51-3.26)
	А	2.73	(2.38–3.13)	2.64	(2.29–3.06)	4.17	(3.61–4.82)	2.86	(2.48-3.30)	2.50	(2.18-2.87)
Biparental (<i>n=870; 1.3%</i>)	U	3.32	(2.79–3.94)	3.04	(2.53–3.67)	5.78	(4.84–6.89)	3.28	(2.76–3.89)	3.28	(2.76–3.90)
	А	3.05	(2.55–3.65)	2.69	(2.21–3.28)	5.02	(4.16–6.04)	3.69	(3.08–4.43)	2.89	(2.42-3.46)

<u>Note</u>: OR = odds ratio; CI = confidence interval; U = unadjusted, A = adjusted for *child sex, child age, English as second language, socioeconomic status*, and *maternal age at birth*; SOCIAL = Social Competence; EMOTIONAL = Emotional Maturity; COGNITIVE = Language and Cognitive Development; COMMUNICATION = Communication Skills and General Knowledge; PHYSICAL = Physical Health and Wellbeing. Missing data on the individual AEDC domain outcome variables ranged between 169-411 (0.3-0.6%) children. The reference group for all analyses is children with no parental offending history (n=46,669).

				SOCIAL	EI	MOTIONAL	C	OGNITIVE	COM	MUNICATION		PHSYICAL
			F (n=1,740; 5.3%)		F (n=1	F (n=1,095; 3.3%)		F (n=1,333; 4.1%)		F (n=2,019; 6.1%)		.001; 6.1%)
			М (<i>n=</i> .	3,809; 11.3%)	M (n=3,639; 10.8%)		M (n=2,256; 6.7%)		M (n=3,461; 10.3%)		M (n=3,466; 10.3%	
			OR	95% CI	OR	CI	OR	CI	OR	CI	OR	CI
Any Offending												
Paternal	F	(n=8,732; 26.6%)	1.66	(1.49–1.85)	1.55	(1.35–1.77)	1.83	(1.62–2.06)	1.55	(1.40–1.72)	1.65	(1.49–1.82)
	Μ	(n=8,899; 26.5%)	1.69	(1.57–1.82)	1.58	(1.46–1.70)	2.12	(1.93–2.33)	1.62	(1.49–1.75)	1.54	(1.42–1.67)
Maternal	F	(n=2,880; 8.8%)	2.20	(1.90–2.54)	2.14	(1.79–2.55)	3.10	(2.66–3.60)	2.43	(2.11–2.79)	2.54	(2.23–2.90)
	М	(n=2,895; 8.6%)	2.16	(1.94–2.40)	1.96	(1.75–2.19)	2.90	(2.56–3.30)	2.12	(1.89–2.38)	2.03	(1.82–2.27)
Biparental	F	(n=1,779; 5.4%)	2.41	(2.03–2.85)	2.11	(1.71–2.62)	3.59	(3.01–4.28)	2.67	(2.26–3.15)	2.73	(2.33–3.19)
	Μ	(n=1,819; 5.4%)	2.44	(2.15–2.78)	2.15	(1.89–2.45)	3.35	(2.88–3.89)	2.31	(2.01–2.66)	2.21	(1.93–2.52)
Violent Offending												
Paternal	F	(n=3,393; 10.3%)	2.08	(1.81–2.39)	1.80	(1.51–2.15)	2.60	(2.24–3.02)	1.92	(1.68–2.20)	2.23	(1.96–2.53)
	М	(n=3,460; 10.3%)	2.08	(1.88–2.30)	1.84	(1.66–2.04)	2.61	(2.31–2.94)	1.95	(1.75–2.18)	1.75	(1.57–1.95)
Maternal	F	(n=901; 2.7%)	2.77	(2.24–3.43)	2.58	(1.99–3.34)	3.94	(3.15–4.92)	2.82	(2.26–3.51)	2.89	(2.36–3.53)
	Μ	(n=823; 2.4%)	2.66	(2.23–3.17)	2.63	(2.21–3.14)	4.33	(3.58–5.25)	2.89	(2.40–3.48)	2.19	(1.81–2.64)
Biparental	F	(n=461; 1.4%)	2.61	(1.95–3.49)	2.10	(1.45-3.04)	4.21	(3.15–5.63)	3.52	(2.66–4.65)	3.37	(2.61–4.36)
	М	(n=409; 1.2%)	3.30	(2.62-4.16)	2.95	(2.33–3.72)	5.69	(4.46–7.27)	3.84	(3.02–4.89)	2.47	(1.92–3.17)

Supplementary Table S2: Adjusted associations¹ for female (n=32,852) and male (n=33,625) children between *any* and *violent* offending histories (paternal, maternal, biparental) and vulnerability on the five Australian Early Development Census (AEDC) domains

Note: ¹adjusted for *child sex, child age, English as second language, socioeconomic status,* and *maternal age at birth;* OR = odds ratio; CI = confidence interval; F = female, M = male; SOCIAL = Social Competence; EMOTIONAL = Emotional Maturity; COGNITIVE = Language and Cognitive Development; COMMUNICATION = Communication Skills and General Knowledge; PHYSICAL = Physical Health and Wellbeing. Missing data on the AEDC domains ranged between 72-159 (0.2-0.5%) girls and 97-252 (0.3-0.7%) boys. The reference groups for the analyses include girls/boys with no parental offending history (girls: n=23,019; boys: n=23,650).

Supplementary Table S3: Associations for children with *any* and *violent* offending histories (paternal, maternal) and vulnerability on the five Australian Early Development Census (AEDC) domains after adjusting for the offending history of the other parent

	SOCIAL	EMOTIONAL	COGNITIVE	COMMUNICATION	PHYSICAL		
	(n=5,549; 8.3%)	(n=4,734; 7.1%)	(n=3,589; 5.4%)	(n=5,480; 8.2%)	(n=5,467; 8.2%)		
	OR (95% CI)						
Any Offending							
Paternal ¹	1.49 (1.40–1.58)	1.40 (1.31–1.50)	1.63 (1.51–1.76)	1.38 (1.30–1.48)	1.37 (1.29–1.46)		
Maternal ²	1.68 (1.54–1.82)	1.60 (1.46–1.76)	2.15 (1.96–2.36)	1.82 (1.67–1.98)	1.82 (1.68–1.98)		
Violent Offending							
Paternal ¹	1.73 (1.60–1.88)	1.51 (1.38–1.64)	1.91 (1.75–2.09)	1.63 (1.50–1.77)	1.63 (1.51–1.77)		
Maternal ²	1.83 (1.60–2.09)	1.93 (1.68–2.23)	2.46 (2.14–2.83)	1.96 (1.70–2.25)	1.73 (1.51–1.98)		

<u>Note</u>: Associations are adjusted for *child sex, child age, English as second language, socioeconomic status,* and *maternal age at birth* and ¹maternal offending and ²paternal offending; OR = odds ratio; CI = confidence interval; F = female, M = male; SOCIAL = Social Competence; EMOTIONAL = Emotional Maturity; COGNITIVE = Language and Cognitive Development; COMMUNICATION = Communication Skills and General Knowledge; PHYSICAL = Physical Health and Wellbeing.

Supplementary Table S4: Associations for children with *any* and *violent* offending histories (paternal, maternal, biparental) and vulnerability on each of the five Australian Early Development Census (AEDC) domains after adjusting for vulnerability on the other AEDC domains

	SOCIAL (n=5,549; 8.3%)	EMOTIONAL (n=4,734; 7.1%)	COGNITIVE (<i>n</i> =3,589; 5.4%)	COMMUNICATION (<i>n</i> =5,480; 8.2%)	PHYSICAL (n=5,467; 8.2%)
	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
Any Offending					
Paternal	1.28 (1.19–1.39)	1.20 (1.11-1.30)	1.66 (1.53–1.81)	1.20 (1.11-1.30)	1.27 (1.18–1.36)
Maternal	1.31 (1.17–1.48)	1.34 (1.19–1.50)	2.19 (1.95–2.45)	1.40 (1.26–1.57)	1.57 (1.42–1.73)
Biparental	1.41 (1.23–1.62)	1.30 (1.13–1.50)	2.48 (2.16–2.83)	1.37 (1.20–1.56)	1.60 (1.42–1.81)
Violent Offending					
Paternal	1.43 (1.29–1.60)	1.22 (1.09–1.36)	1.99 (1.78–2.23)	1.28 (1.15–1.42)	1.41 (1.28–1.55)
Maternal	1.33 (1.10-1.60)	1.64 (1.36-1.97)	2.89 (2.42-3.44)	1.49 (1.24–1.78)	1.47 (1.25–1.74)
Biparental	1.33 (1.03–1.71)	1.39 (1.08–1.80)	3.07 (2.44–3.87)	1.81 (1.43–2.28)	1.52 (1.22–1.89)

<u>Note</u>: Associations are adjusted for *child sex, child age, English as second language, socioeconomic status,* and *maternal age at birth* and for *vulnerability on each of the other four AEDC domains*; OR = odds ratio; CI = confidence interval; F = female, M = male; SOCIAL = Social Competence; EMOTIONAL = Emotional Maturity; COGNITIVE = Language and Cognitive Development; COMMUNICATION = Communication Skills and General Knowledge; PHYSICAL = Physical Health and Wellbeing.

		Or	e domain	Tv	vo domains	Th	ree domains	Fo	ur domains	Fiv	e domains
		(n=6)	.950; 10.5%)	(n=	3,309; 5.0%)	(n=	1,648; 2.5%)	(n=	1,013; 1.5%)	(n=	451; 0.7%)
		OR	(95% CI)	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)
Any Offending											
Paternal (<i>n=17,631; 26.5%</i>)	U	1.55	(1.46–1.63)	1.96	(1.82–2.11)	2.07	(1.87–2.30)	2.21	(1.94–2.52)	3.12	(2.57–3.77)
	А	1.46	(1.38–1.55)	1.78	(1.64–1.92)	1.85	(1.66–2.06)	1.90	(1.66–2.18)	2.86	(2.34–3.49)
Maternal (<i>n=5,775; 8.7%</i>)	U	2.07	(1.91–2.24)	2.93	(2.65–3.24)	3.26	(2.84–3.73)	3.47	(2.93–4.11)	4.66	(3.64–5.96)
	А	1.97	(1.81–2.14)	2.62	(2.35–2.92)	2.93	(2.53–3.39)	2.99	(2.50–3.58)	4.30	(3.30–5.60)
Biparental (<i>n=3,598; 5.4%</i>)	U	2.21	(2.01–2.44)	3.30	(2.92–3.72)	3.47	(2.95–4.09)	4.26	(3.52–5.16)	5.45	(4.12–7.21)
	Α	2.12	(1.91–2.35)	2.96	(2.61–3.37)	3.12	(2.62–3.72)	3.63	(2.95–4.47)	5.13	(3.78–6.96)
		Or	ie domain	Τv	vo domains	Three	or more doma	nins			
		(n=6)	,950; 10.5%)	(n=	3,309; 5.0%)	(n	n=3,112; 4.7%)				
		OR	(95% CI)	OR	(95% CI)	OR	(95% CI)				
Violent Offending											
Paternal <i>(n=6,853; 10.3%)</i>	U	1.91	(1.77–2.06)	2.52	(2.28–2.78)	3.17	(2.87–3.49)				
	А	1.78	(1.65–1.93)	2.24	(2.01–2.48)	2.69	(2.42–2.98)				
Maternal (<i>n=1,724; 2.6%</i>)	U	2.63	(2.30–3.00)	3.72	(3.16–4.38)	4.92	(4.21–5.74)				
	А	2.58	(2.24–2.96)	3.42	(2.87–4.06)	4.49	(3.80–5.30)				
Biparental (<i>n=870; 1.3%</i>)	U	2.91	(2.42–3.48)	3.69	(2.93–4.66)	5.98	(4.88–7.31)				
	Α	2.92	(2.43–3.52)	3.49	(2.74–4.43)	5.61	(4.53–6.95)				

Supplementary Table S5: Associations between *any* and *violent* offending history (paternal, maternal, biparental) and the number of Australian Early Development Census (AEDC) domains on which children present vulnerability

<u>Note</u>: OR = odds ratio; CI = confidence interval; U = unadjusted, A = adjusted for *child sex, child age, English as second language, socioeconomic status,* and *maternal age at birth*. Missing data on the number of AEDC domains of vulnerability totalled 168 (0.3%) children. The reference group for all analyses is children no parental offending history (n=46,669).

		Or	ne domain	Τv	vo domains	Three	e or more domains	
		F (n=2,	.745; 8.4%)	F (n=1	1,083; 3.3%)	F (n=912; 2.8%) ²		
		M (n=4	4,205; 12.5%)	М (n=	2,226; 6.6%)	M (n=	2,200; 6.5%) ³	
		OR	(95% CI)	OR	(95% CI)	OR	(95% CI)	
Any Offending								
Paternal	F (n=8,732; 26.6%) 1.49	(1.36–1.63)	1.78	(1.56–2.04)	1.93	(1.67–2.28)	
	M (n=8,899; 26.5%) 1.44	(1.34–1.55)	1.77	(1.61–1.95)	2.01	(1.82–2.21)	
Maternal	F (n=2,880; 8.8%)	2.25	(1.98-2.54)	2.89	(2.42-3.45)	3.27	(2.72-3.93)	
	M (n=2,895; 8.6%)	1.75	(1.56-1.97)	2.43	(2.12-2.79)	2.96	(2.59-3.39)	
Biparental	F (n=1,779; 5.4%)	2.41	(2.07-2.80)	3.10	(2.51-3.83)	3.69	(2.98–4.58)	
	M (n=1,819; 5.4%)	1.90	(1.65–2.18)	2.83	(2.41–3.33)	3.36	(2.86–3.95)	
Violent Offending								
Paternal	F (n=3,393; 10.3%) 1.94	(1.73-2.19)	2.19	(1.84-2.62)	2.80	(2.34–3.35)	
	M (n=3,460; 10.3%) 1.66	(1.49-1.85)	2.24	(1.96-2.55)	2.60	(2.29-2.96)	
Maternal	F (n=901; 2.7%)	2.93	(2.42-3.56)	3.73	(2.86-4.87)	4.19	(3.19–5.51)	
	M (n=823; 2.4%)	2.25	(1.84–2.74)	3.14	(2.50–3.94)	4.45	(3.60–5.51)	
Both Parents	F (n=461; 1.4%)	3.06	(2.35–3.97)	3.55	(2.47–5.12)	4.61	(3.25–6.54)	
	M (n=409; 1.2%)	2.80	(2.14–3.67)	3.41	(2.48–4.71)	6.09	(4.63–8.02)	

Supplementary Table S6: Adjusted associations¹ for female (n=32,852) and male (n=33,625) children between *any* offending and *violent* offending histories (paternal, maternal, both parents) and the number of Australian Early Development Census (AEDC) domains on which children present vulnerability

<u>Note</u>: ¹adjusted for *child sex, child age, English as second language, socioeconomic status,* and *maternal age at birth;* OR = odds ratio; CI = confidence interval; F = female, M = male; ² female children: three domains (n=492, 1.5%); four domains (n=299, 0.9%), five domains (n=121, 0.4%); ³ male children: three domains (n=1,156, 3.4%); four domains (n=714, 2.1%), five domains (n=330, 1.0%). Missing data on the number of AEDC domains of vulnerability totalled 71 (0.2%) girls and 97 (0.3%) boys. The reference groups for the analyses include girls/boys with no parental offending history (girls: n=23,019; boys: n=23,650).