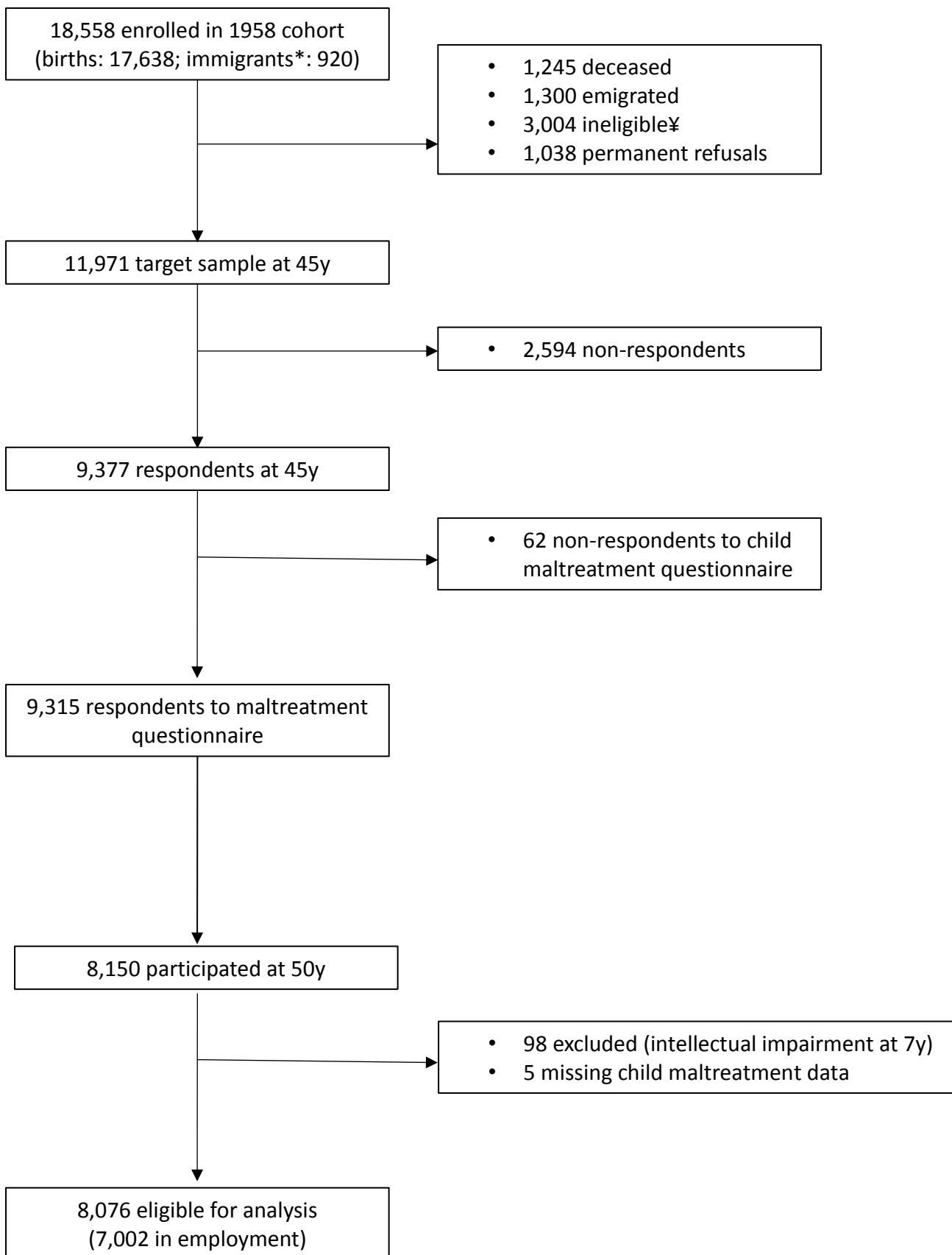


Supplementary Figure 1: Flow chart of 1958 birth cohort participants included in study



*to age 16

¥'ineligible' were not contacted for the 45y survey; they include those who had not participated in any childhood follow-up survey, those who had not participated since 16y, lacked a valid address, had previously displayed threatening behaviours, were incapable of giving informed consent or were in the armed forces (see Atherton K et al. *J Epidemiol Community Health* 2008;62(3):216-23 for details).

Supplementary Table 1: OR (95% CI) for types of child maltreatment with adult labour market participation, living standards and social class in the 1958 birth cohort

		Neglect (prospective)	Emotional neglect	Sexual abuse	Physical abuse	Psychological abuse	Witness abuse
LTS*	Model 1	2.50 (1.94,3.22)	1.76 (1.30,2.39)	3.51 (1.93,6.36)	2.54 (1.78,3.63)	2.25 (1.67,3.03)	1.97 (1.34,2.89)
	Model 2 [‡]	1.77 (1.34,2.33)	1.60 (1.18,2.18)	2.98 (1.62,5.47)	2.36 (1.64,3.40)	2.20 (1.62,2.98)	1.62 (1.09,2.40)
	Model 3 ^χ	1.69 (1.28,2.23)	1.20 (0.85,1.68)	1.92 (1.01,3.67)	1.54 (0.96,2.45)	1.64 (1.11,2.42)	0.87 (0.55,1.40)
NEET*	Model 1	1.67 (1.32,2.13)	1.41 (1.09,1.82)	1.87 (1.07,3.25)	1.52 (1.08,2.12)	1.43 (1.10,1.85)	1.74 (1.28,2.35)
	Model 2 [‡]	1.47 (1.13,1.90)	1.35 (1.05,1.75)	1.70 (0.97,2.99)	1.44 (1.03,2.02)	1.41 (1.08,1.84)	1.59 (1.17,2.16)
	Model 3 ^χ	1.42 (1.10,1.85)	1.20 (0.91,1.57)	1.29 (0.71,2.32)	1.01 (0.66,1.55)	1.15 (0.83,1.59)	1.33 (0.92,1.90)
Lack of assets	Model 1	2.27 (1.93,2.66)	1.44 (1.19,1.73)	2.60 (1.72,3.92)	1.75 (1.38,2.22)	1.53 (1.26,1.86)	1.88 (1.49,2.37)
	Model 2 [‡]	1.73 (1.46,2.05)	1.31 (1.09,1.59)	2.12 (1.39,3.23)	1.57 (1.23,2.00)	1.46 (1.20,1.78)	1.57 (1.24,1.99)
	Model 3 ^χ	1.68 (1.42,1.99)	1.13 (0.92,1.38)	1.57 (1.00,2.45)	1.16 (0.86,1.57)	1.15 (0.90,1.48)	1.23 (0.93,1.62)
Income-related support	Model 1	1.17 (0.97,1.40)	1.19 (0.98,1.44)	2.15 (1.41,3.27)	1.29 (1.00,1.67)	1.41 (1.17,1.71)	1.55 (1.22,1.97)
	Model 2 [‡]	1.06 (0.88,1.28)	1.16 (0.95,1.40)	2.06 (1.35,3.14)	1.26 (0.98,1.63)	1.41 (1.16,1.71)	1.47 (1.16,1.88)
	Model 3 ^χ	1.03 (0.85,1.24)	1.04 (0.84,1.28)	1.70 (1.09,2.64)	0.90 (0.65,1.24)	1.28 (1.01,1.62)	1.26 (0.95,1.68)
Financial insecurity	Model 1	1.31 (1.02,1.68)	2.37 (1.87,3.00)	2.95 (1.70,5.13)	1.87 (1.34,2.61)	2.53 (1.98,3.25)	1.97 (1.42,2.74)
	Model 2 [‡]	1.27 (0.97,1.67)	2.34 (1.84,2.98)	2.82 (1.61,4.93)	1.86 (1.33,2.60)	2.54 (1.98,3.25)	1.92 (1.37,2.67)
	Model 3 ^χ	1.16 (0.88,1.54)	1.87 (1.44,2.43)	1.75 (0.97,3.16)	0.81 (0.53,1.24)	2.01 (1.47,2.75)	1.12 (0.75,1.66)
Poor qualifications	Model 1	3.67 (3.22,4.18)	1.32 (1.14,1.53)	2.33 (1.61,3.38)	1.23 (1.01,1.50)	1.09 (0.93,1.27)	1.64 (1.35,1.99)
	Model 2 [‡]	2.31 (2.00,2.67)	1.14 (0.97,1.34)	1.65 (1.10,2.46)	0.98 (0.79,1.21)	0.97 (0.82,1.16)	1.19 (0.96,1.46)
	Model 3 ^χ	2.30 (1.99,2.66)	1.11 (0.94,1.32)	1.49 (0.97,2.29)	0.86 (0.66,1.13)	0.87 (0.70,1.07)	1.19 (0.93,1.52)
Manual social class	Model 1	2.54 (2.22,2.91)	1.26 (1.07,1.48)	2.15 (1.37,3.36)	1.13 (0.90,1.42)	0.99 (0.83,1.19)	1.32 (1.05,1.66)
	Model 2 [‡]	1.78 (1.53,2.06)	1.14 (0.96,1.35)	1.73 (1.08,2.76)	0.95 (0.75,1.21)	0.92 (0.76,1.12)	1.03 (0.81,1.31)
	Model 3 ^χ	1.77 (1.52,2.05)	1.15 (0.96,1.38)	1.76 (1.08,2.87)	0.92 (0.69,1.23)	0.85 (0.67,1.07)	1.03 (0.78,1.35)

*LTS: long term sickness absence (baseline = employed, in education or training).

*NEET: not in employment, education or training (baseline = employed, in education or training).

All models sex adjusted

[‡]Model 2: additionally adjusted for covariates (maternal age, birthweight, birth order, childhood ill-health, social class in 1958, parental education, household amenities, crowding and tenure)

^χModel 3: additionally adjusted for covariates (listed above) and simultaneously adjusted for other types of child maltreatment

Supplementary Table 2: OR (95% CI) for types of child maltreatment with LTS*, NEET and manual social class at 23y and 50y

	LTS		NEET		Manual social class	
	23y	50y	23y	50y	23y	50y
Prevalence	0.30%	4.30%	18.90%	7.40%	40.30%	31.30%
Neglect (prospective)						
Model 1	1.76 (0.57,5.46)	2.50 (1.94,3.22)	2.13 (1.83,2.46)	1.67 (1.32,2.13)	3.28 (2.84,3.78)	2.54 (2.22,2.91)
Model 2 [‡]	1.19 (0.34,4.19)	1.77 (1.34,2.33)	1.59 (1.36,1.86)	1.47 (1.13,1.90)	2.04 (1.74,2.38)	1.78 (1.53,2.06)
Emotional neglect						
Model 1	3.07 (1.13,8.37)	1.76 (1.30,2.39)	1.49 (1.24,1.79)	1.41 (1.09,1.82)	1.47 (1.26,1.73)	1.26 (1.07,1.48)
Model 2 [‡]	2.72 (0.99,7.46)	1.60 (1.18,2.18)	1.34 (1.11,1.62)	1.35 (1.05,1.75)	1.29 (1.08,1.54)	1.14 (0.96,1.35)
Sexual abuse						
Model 1	8.84 (1.96,39.88)	3.51 (1.93,6.36)	2.31 (1.53,3.50)	1.87 (1.07,3.25)	2.40 (1.58,3.63)	2.15 (1.37,3.36)
Model 2 [‡]	7.26 (1.56,33.77)	2.98 (1.62,5.47)	1.84 (1.20,2.82)	1.70 (0.97,2.99)	1.76 (1.12,2.75)	1.73 (1.08,2.76)
Physical abuse						
Model 1	2.25 (0.53,9.65)	2.54 (1.78,3.63)	1.71 (1.33,2.20)	1.52 (1.08,2.12)	1.31 (1.05,1.63)	1.13 (0.90,1.42)
Model 2 [‡]	2.00 (0.46,8.78)	2.36 (1.64,3.40)	1.47 (1.14,1.91)	1.44 (1.03,2.02)	1.05 (0.83,1.34)	0.95 (0.75,1.21)
Psychological abuse						
Model 1	2.26 (0.71,7.17)	2.25 (1.67,3.03)	1.58 (1.29,1.92)	1.43 (1.10,1.85)	1.18 (0.99,1.40)	0.99 (0.83,1.19)
Model 2 [‡]	2.19 (0.68,7.06)	2.20 (1.62,2.98)	1.48 (1.20,1.81)	1.41 (1.08,1.84)	1.07 (0.89,1.29)	0.92 (0.76,1.12)
Witness abuse						
Model 1	2.28 (0.57,9.14)	1.97 (1.34,2.89)	1.73 (1.39,2.17)	1.74 (1.28,2.35)	1.52 (1.22,1.89)	1.32 (1.05,1.66)
Model 2 [‡]	1.77 (0.44,7.15)	1.62 (1.09,2.40)	1.43 (1.14,1.80)	1.59 (1.17,2.16)	1.10 (0.87,1.38)	1.03 (0.81,1.31)

All models sex adjusted

‡Model 2: additionally adjusted for covariates (maternal age, birthweight, birth order, childhood ill-health, social class in 1958, parental education, household amenities, crowding and tenure)

*at 23y the outcome is sickness absence at 50y the outcome is long-term sickness absence; note at 23y wide confidence intervals due to very low prevalence of sickness absence (0.3%)

Supplementary Table 3: OR (95% CI) by number of types of child maltreatment for adult labour market participation, living standards and social class in the 1958 birth cohort

	N (%)	LTS*		NEET ^z		Lack of assets		Income-related support		Financial insecurity		Poor qualifications		Manual social class	
		Model 1	Model 2 ^y	Model 1	Model 2 ^y	Model 1	Model 2 ^y	Model 1	Model 2 ^y	Model 1	Model 2 ^y	Model 1	Model 2 ^y	Model 1	Model 2 ^y
No of types of maltreatment															
0	5,584 (69.1)	1 (Reference)	1 (Reference)	1 (Reference)	1 (Reference)	1 (Reference)	1 (Reference)	1 (Reference)	1 (Reference)	1 (Reference)	1 (Reference)	1 (Reference)	1 (Reference)	1 (Reference)	1 (Reference)
1	1,663 (20.6)	2.24 (1.70,2.95)	1.76 (1.32,2.35)	1.45 (1.16,1.81)	1.33 (1.05,1.67)	1.96 (1.68,2.29)	1.61 (1.37,1.89)	1.16 (0.99,1.37)	1.10 (0.93,1.30)	1.93 (1.54,2.42)	1.98 (1.56,2.51)	2.38 (2.11,2.68)	1.70 (1.48,1.94)	2.08 (1.83,2.38)	1.63 (1.42,1.88)
≥2 ^ε	829 (10.3)	3.35 (2.48,4.52)	2.69 (1.96,3.68)	1.79 (1.38,2.32)	1.63 (1.25,2.14)	2.26 (1.87,2.73)	1.84 (1.51,2.23)	1.46 (1.21,1.76)	1.39 (1.14,1.68)	2.65 (2.02,3.48)	2.73 (2.06,3.62)	2.20 (1.89,2.57)	1.49 (1.27,1.76)	1.64 (1.38,1.95)	1.23 (1.03,1.47)
Per additional maltreatment ^z		1.49 (1.36,1.63)	1.65 (1.42,1.93)	1.26 (1.16,1.37)	1.29 (1.13,1.47)	1.36 (1.28,1.44)	1.40 (1.28,1.53)	1.15 (1.08,1.22)	1.16 (1.06,1.27)	1.39 (1.28,1.51)	1.69 (1.48,1.93)	1.40 (1.33,1.47)	1.32 (1.22,1.43)	1.28 (1.21,1.35)	1.13 (1.07,1.21)

*LTS=: long term sickness absence (baseline = employed, education or training).

^zNEET: not in employment, education or training (baseline = employed, in education or training).

All associations are sex adjusted

^y Model 2: additionally adjusted for covariates (maternal age, birthweight, birth order, childhood ill-health, social class in 1958, parental education, household amenities, crowding and tenure)

^zOR for adult outcome per additional maltreatment experienced (0, 1, ≥2)

^ε ≥2 types includes N (%) 2: 462 (5.7); 3: 215 (2.7); 4: 109 (1.4); 5: 37 (0.5); 6: 6 (0.1)

Supplementary Table 4: OR (95% CI) for total and direct effects of types of child maltreatment[‡] with adult labour market participation, living standards and social class in the 1958 birth cohort

		Neglect (prospective)	Emotional neglect	Sexual abuse	Non-sexual abuse ^χ		
					0	1	2-3
LTS*	Total effect [‡]	1.69 (1.28,2.23)	1.18 (0.84,1.65)	1.80 (0.95,3.42)	1	1.75 (1.22,2.51)	2.10 (1.40,3.17)
	direct effect: model 1	1.32 (0.88,1.99)			1	2.27 (1.52,3.38)	2.56 (1.51,4.34)
	direct effect: model 2	1.53 (1.06,2.20)			1	2.11 (1.42,3.13)	2.32 (1.34,4.01)
	direct effect: model 3	1.30 (0.85,1.98)			1	2.22 (1.49,3.31)	2.43 (1.38,4.26)
NEET [‡]	Total effect [‡]	1.43 (1.10,1.85)	1.20 (0.92,1.58)	1.35 (0.75,2.43)	1	1.20 (0.89,1.63)	1.33 (0.93,1.90)
	direct effect: model 1	1.39 (0.93,2.06)					
	direct effect: model 2	1.50 (1.05,2.15)					
	direct effect: model 3	1.41 (0.95,2.09)					
Lack of assets	Total effect [‡]	1.68 (1.42,1.99)	1.13 (0.92,1.38)	1.62 (1.04,2.53)	1	1.31 (1.04,1.64)	1.36 (1.04,1.78)
	direct effect: model 1	1.23 (0.95,1.59)		1.76 (0.80,3.89)	1	1.35 (1.04,1.75)	1.56 (1.08,2.24)
	direct effect: model 2	1.47 (1.17,1.85)		2.14 (0.91,4.99)	1	1.27 (0.97,1.65)	1.46 (0.99,2.16)
	direct effect: model 3	1.22 (0.94,1.59)		1.76 (0.78,3.94)	1	1.32 (1.02,1.73)	1.56 (1.06,2.30)
Income-related support	Total effect [‡]	1.03 (0.85,1.24)	1.03 (0.84,1.27)	1.75 (1.12,2.72)	1	1.29 (1.03,1.61)	1.32 (1.00,1.74)
	direct effect: model 1			1.05 (0.54,2.06)	1	1.29 (0.99,1.70)	1.50 (1.05,2.15)
	direct effect: model 2			1.04 (0.52,2.06)	1	1.24 (0.95,1.63)	1.33 (0.92,1.91)
	direct effect: model 3			1.01 (0.51,1.99)	1	1.28 (0.98,1.68)	1.39 (0.96,2.01)
Financial insecurity	Total effect [‡]	1.16 (0.88,1.54)	1.86 (1.43,2.41)	1.86 (1.04,3.34)	1	2.02 (1.51,2.69)	1.56 (1.08,2.27)
	direct effect: model 1		2.31 (1.73,3.10)	2.06 (0.91,4.66)	1	2.47 (1.77,3.43)	2.18 (1.34,3.55)
	direct effect: model 2		2.26 (1.69,3.02)	2.09 (0.92,4.75)	1	2.36 (1.70,3.28)	2.10 (1.29,3.42)
	direct effect: model 3		2.30 (1.72,3.08)	2.07 (0.91,4.70)	1	2.37 (1.70,3.30)	2.16 (1.32,3.53)
Poor qualifications	Total effect [‡]	2.30 (1.99,2.66)	1.11 (0.94,1.32)	1.53 (1.00,2.34)	1	0.90 (0.73,1.09)	0.88 (0.69,1.12)
	direct effect: model 1	1.31 (1.08,1.59)		1.29 (0.64,2.60)			
	direct effect: model 2	2.11 (1.75,2.55)		1.53 (0.74,3.17)			
	direct effect: model 3	1.29 (1.06,1.56)		1.24 (0.61,2.52)			
Manual social class	Total effect [‡]	1.77 (1.53,2.06)	1.17 (0.97,1.40)	1.80 (1.11,2.93)	1	0.79 (0.64,0.98)	0.82 (0.63,1.07)
	direct effect: model 1	1.28 (1.04,1.59)		5.19 (2.14,12.57)			
	direct effect: model 2	1.71 (1.42,2.07)		6.30 (2.62,15.13)			
	direct effect: model 3	1.24 (1.01,1.54)		5.49 (2.26,13.30)			

The total effect represents both the direct and indirect effect of maltreatment on the outcome.

Model 1: the direct effect represents the effect of maltreatment on the outcome that is not mediated by cognition (modelled as a continuous z-score)

Model 2: the direct effect represents the effect of maltreatment on the outcome that is not mediated by mental health (modelled as two continuous z-scores)

Model 3: the direct effect represents the effect of maltreatment on the outcome that is not mediated by cognition or mental health (modelled as indicated above)

[‡] Simultaneously adjusted for all types of child maltreatment, sex and covariates (maternal age, birthweight, birth order, childhood ill-health, social class in 1958, parental education, household amenities, crowding and tenure)

*LTS: long term sickness absence (baseline = employed, in education or training).

[‡]NEET: not in employment, education or training (baseline = employed, in education or training).