

Supplemental Information for ‘Childhood and adult socioeconomic position interact to predict health in mid life in a cohort of British women’

S1. Study variables and descriptive statistics

Variables used in the present study, along with their NCDS codes and descriptive statistics, are shown in table S1.

Variable	NCDS code	Descriptives
Childhood socioeconomic position (cSEP)	Derived by PCA [see section 2] from: n2397, n492, n49/n46	Mean 0, s.d. 1
Adult socioeconomic position (aSEP) aged 23	Derived by PCA [see section S2] from: curroscr, hqual23	Mean 0, s.d. 1
Adult socioeconomic position (aSEP) aged 33	Derived by PCA [see section S2] from: curroscr, n540033, hqual23, hqual33	Mean 0, s.d. 1
Adult socioeconomic position (aSEP) aged 42	Derived by PCA [see section S2] from: curroscr, n540033, sc, hqual23, hqual33, n7iamt	Mean 0, s.d. 1
Self-rated health aged 23	n5739	Mean 3.30, s.d. 0.68
Self-rated health aged 33	n503913	Mean 3.17, s.d. 0.70
Self-rated health aged 42	hlthgen	Mean 3.07, s.d. 0.77

Table S1. NCDS codes and descriptive statistics for variables used.

S2. Derivation of aSEP and cSEP variables by Principal Components Analysis

The cSEP and aSEP variables were produced by saving the first factor (scores derived using the regression method) from a principal components analysis (PCA) of the component variables. Missing values were replaced with the mean. The extracted factors accounted respectively for 56% of the variation (cSEP), 76% of the variation (aSEP aged 23), 69% of the variation (aSEP aged 33), and 57% of the variation (aSEP aged 42). The KMO measures of sampling adequacy were 0.64 (cSEP), 0.50 (aSEP aged 23), 0.70 (aSEP aged 33), and 0.78 (aSEP aged 42); whilst $p < 0.01$ for Bartlett’s sphericity test in all cases (cSEP: $\chi^2_3 = 2805.74$; aSEP aged 23: $\chi^2_3 = 2819.78$; aSEP aged 33: $\chi^2_6 = 25162.79$; aSEP aged 42: $\chi^2_{15} = 30642.85$). A KMO measure of at least 0.5 and a Bartlett’s test with $p < 0.05$ are considered prerequisites for the suitability of PCA.

Loadings on the derived SEP components were as given in table S2.

Component	Constituent variable	Loading
cSEP	Father's social class	-0.76
	Mother's age at leaving education	0.72
	Proportion of professional fathers in child's school class	0.76
aSEP aged 23	Highest educational qualification, age 23	0.87
	Social class, age 23	-0.87
aSEP aged 33	Highest educational qualification, age 23	0.91
	Social class, age 23	-0.74
	Highest educational qualification, age 33	0.92
	Social class, age 33	-0.73
aSEP aged 42	Highest educational qualification, age 23	0.87
	Social class, age 23	-0.72
	Highest educational qualification, age 33	0.88
	Social class, age 33	-0.74
	Social class, age 42	-0.69
	Grouped household income, age 42	0.56

Table S2. Loadings of individual constituent variables on the adult socioeconomic position (aSEP) and childhood socioeconomic position (cSEP) factors.

The aSEP and cSEP variables were re-standardised in running each statistical model, since different missing cases at each age point mean that the effective mean and standard deviation can otherwise depart slightly from 0 and 1 respectively in particular models.