ONLINE APPENDIX

HTTP://WORLDHAPPINESS.REPORT/

DEFINITIONS OF VARIABLES

Table A1: BRFSS, BHPS and HILDA Variables

	BRFSS	BHPS	HILDA
Life Satisfaction	"In general, how satisfied are you with your life?" (1-4 scale)	'How dissatisfied or satisfied are you with your life' (1-7 scale; rescaled to 0-10)	'All things considered, how satisfied are you with your life?' 0-10 Scale
Household Income	Annual gross HH income (equivalised)	Monthly Net HH Income (£2010, equivalised)	Monthly Net HH Income ($2010, equivalised)
Gender	Female = 1	Female = 1	Female = 1
Age	Years old at survey	Years old at survey	Years old at survey
Children	Number of children residing in household	Number of children residing in household	Number of children residing in household
Marital Status	Single (responded "Single"); Partnered (responded "Married", "Remarried", "Live as Married"); Separated (responded "Divorced", "Separated"); Widowed (responded "Widowed")	Single (responded "Single"); Partnered (responded "Married", "Remarried", "Live as Married"); Separated (responded "Divorced", "Separated"); Widowed (responded "Widowed")	Single (responded "Single"); Partnered (responded "Married", "Live as Married"); Separated (responded "Divorced", "Separated"); Widowed (responded "Widowed")
Education	Education level (1-6)	Years of Education (derived from school leaving age and/or FE leaving age)	Years of education
Employment	Employed; Self-Employed; Unemployed; Not in labour force; Student	FT Employed (>29 hours a week in employment); FT Employed (<30 hours a week in employment); Self-Employed; Unemployed; Not in labour force	FT Employed (>29 hours a week in employment); FT Employed (<30 hours a week in employment); Self-Employed; Unemployed; Not in labour force
Physical health	Number of Yes answers. Have you ever been told by a doctor, nurse or other health professional that you had: Diabetes, Herat attack, Angina or coronary heart disease, Stroke, Asthma, Arthritis, Cataracts, Glaucoma, Macular degeneration, Prostate cancer	Number of Yes answers. Do you have any of the health problems or disabilities listed on this card? Exclude temporary conditions. Problems or disability connected with arms, legs, hands, feet, back, or neck; Difficulty in hearing; Skin conditions/allergies; Chest/breathing problems, asthma, bronchitis; Heart/blood pressure or blood circulation problems; Stomach/liver/kidneys or digestive problems; Diabetes; Epilepsy	SF-36 questionnaire. Physical functioning, Physical factors affecting role, Bodily pain
Mental health	Yes to either or both of the following: • Have you ever been told you have an anxiety disorder? (Yes/No) • And/or have you ever been told you had a depressive disorder? (Yes/No)	General Health Questionnaire-12	Have you ever been told by a doctor or nurse that you have any long-term health conditions listed below? Depression/Anxiety (Yes/No).

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Table A2: BCS Variables

Variable	Measured at Age (year)	Question(s)	Scale	Reported By
Life satisfaction	42	How dissatisfied or satisfied are you about the way your life as turned out so far?	Responses reported on a 0-10 scale.	Self
Adult outcomes				
Income	34,42	Equivalised household weekly income	£2012, log	Self
Qualifications	34,42	Highest level of education achieved	6 categories (No qual; CSE; O-level; A-level; Degree; Higher degree).	Self
Not unemployed	34,42	Currently not unemployed	Dummy variable 0-1	Self
Non-criminality	30,34	How many times has respondent been formally cautioned at the police station? How many times has a respondent been found guilty by a criminal court?	Total (reversed) score used.	Self
Partnered	34,42	Currently married or cohabiting	Dummy variable 0-1	Self
Having children	34,42	Whether cohort member has any of own kids in the household	Dummy variable 0-1	Self
Physical health conditions	34,42	Number of physical health conditions	Each condition recoded on 0-1 scale. Total points score of 11 questions.	Self
Emotional health	34,42	Has seen a doctor for emotional health problems last year	Dummy variable 0-1	Self
Child outcomes				
Academic Achievement	16	Has at least an O-level (NVQ2)	Dummy variable 0-1	Mother
Behaviour	16	17 questions on behavioural and hyperactivity problems	Each response recoded on 0-1 scale. Total score used.	Mother
Emotional Health	16	22 questions answered by the child and 8 questions answered by the mother on emotional problems	Each response recoded on 0-1 scale. Total score used.	Mother & child
Family				
Parents' Education	pre-birth	Age parents left full time education	Average score used.	Mother
Family Income	10	Equivalised family weekly income	£1986, log	Mother
Involvement	10	Frequency family goes for a walk together; go for outing together; have meal together; go for holidays together; go shopping together; chat for at least 5 minutes; go to restaurant together	Each activity recoded on a 0-1 scale (sometimes or often; rarely). Total score used.	Mother
Mother Mental Health	5,10	Malaise score	Each response recoded on 0-1 scale. Total points score of 24 questions.	Mother
Family Break up	0,5,10,16	Both natural parents live in household at 16	Reverse scale (1,0)	Mother
Mother work	0,5,10,16	Currently employed	# of waves answered yes (/4)	Mother
Father Unemployment	0,5,10,16	Currently unemployed	# of waves answered yes (/4)	Mother

Table A3: IFLS Variables

Life Satisfaction	Please think about your life as a whole: how satisfied are you with it? Completely satisfied; very satisfied; somewhat satisfied; not very satisfied; not at all satisfied.
Household Income	Annual income from all sources (equivalised)
Gender	Female = 1
Age	Years old at survey
Children	Number of children residing in household
Marital Status	Single (responded "Single"); Partnered (responded "Married", Living together"); Separated (responded "Divorced", "Separated"); Widowed (responded "Widowed")
Education	Years of Education Highly educated: Went to college and/or university
Employment	Employed; Unemployed; Student; Homemaker; Retired; Disabled

Physical health	• Has a doctor/paramedic/nurse/midwife ever told you that you had:
	   Hypertension, diabetes, tuberculosis, asthma, lung conditions, heart attack, liver, stroke, cancer, arthritis, cholesterol, prostate illness, kidney disease, stomach or digestive disease (Yes/No)
	
	• Generally how is your health?
	   Very health; Somewhat healthy; Somewhat unhealthy; Very unhealthy
	
	1 if respondent has more than one physical health problem listed above or if respondent answered "somewhat unhealthy" / "unhealthy" to the general health question.

Mental health	How did you feel in the past week? • I was bothered by things that usually don't bother me • I had trouble concentrating on what I was doing • I felt depressed • I felt everything I did was an effort • I felt fearful • My sleep was restless • I felt lonely • I could not get going Rarely or none; Some days; Occasionally; Most of the time To calculate our mental health variable, we compute the total score from the above questions, each of them scaled from 1 to 4.

Table A4: ALSPAC Variables

Variable	Measured at Child Age (months)	Question(s)	Scale	Reported By
Inputs				
Income	33, 47, 85, 97, 134		£2008, log.	Mother*
Financial Problems	2, 8, 21, 33, 47, 61, 73, 97, 110, 122, 134	Major financial problem in past year	# of waves answered yes (/11).	Mother
Parent Education	Pre-birth	Highest level of education achieved (avg. M+F)	A-Level achieved (1,0).	Mother
Father Unemployment	2, 8, 21, 33, 47, 61, 73, 97, 110, 122, 134	Partner lost job in past year	# of waves answered yes (/11).	Mother
Mother Work	8, 21, 33, 47, 61, 73, 97, 110, 122, 134	Currently in work	# of waves answered yes (/10).	Mother
Involvement	6, 18, 42, 57, 69, 81	Frequency of which mother has conversations with the child; sings to child; reads to child; draws/paints with child; helps with homework; helps prepare for school	Each activity reported on a 1-5 scale (never, <less than once a week, once a week, 2-5 a week, every day). Total score used.	Mother
Aggression	18, 42, 57, 78	Frequency of which mother i) shouts at, and ii) smacks/slaps child when has child has a tantrum	Each tantrum response is coded on a 0-2 scale (never, sometime, often). Total score used (/4).	Mother
Family Conflict	21, 33, 73, 110, 145	In past 3 months have you and your partner argued frequently (>3 times)? Either you or your partner been irritable with the other? Not spoken to the other for a long period of time? Walked out on the other? Shouted at the other? Hit/slapped the other? Thrown something in anger?	Total index of yes/no answers (/8).	Mother
Mother Mental Health	2, 8, 21, 33, 61, 73, 97, 134	**Edinburgh Post-Natal Depression Scale (EPDS)**	See Table A6. Reverse coded.	**Mother**
Father Mental Health	2, 8, 21	Crown-Crip Experiential Index (CCEI)	See Table A6. Reverse coded.	Father
Outcomes				
Academic Achievement	Age 16	58 points for an A*, 52 for an A, 46 for a B, etc., to 16 for a G grade in GCSE	Total points score of best 8 GCSEs.	External (National Pupil Database)
	Age 11	Key Stage 2	Average point score on Maths, English and Science	External (National Pupil Database)
	Age 5	School entry assessment	Average on Maths, Reading, Writing and Languages	Local data
Behaviour	All ages	Strengths and Difficulties Questionnaire (SDQ)	Externalising Behaviour Scale Reverse coded.	Mother
Emotional Health	Ages 16 + 11	Short Moods and Feelings Questionnaire (SMFQ)	Total score of mother & child reported	Mother & Child
	Age 5	Strengths and Difficulties Questionnaire (SDQ)	Total score, mother-reported	Mother

*"Mother" refers to the main carer, which is the natural mother in the majority of cases. "Father" refers to the mother's partner.

ASLPAC recruited 14, 541 pregnant women resident in Avon, UK with expected dates of delivery 1st April 1991 to 31st December 1992. 14,541 is the initial number of pregnancies for which the mother enrolled in the ALSPAC study and had either returned at least one questionnaire or attended a "Children in Focus" clinic by 19/07/99. Of these initial pregnancies, there was a total of 14,676 fetuses, resulting in 14,062 live births and 13,988 children who were alive at 1 year of age.

Please note that the study website contains details of all the data that is available through a fully searchable data dictionary: http://www.bris.ac.uk/alspac/researchers/data-access/data-dictionary/

Ethical approval for the study was obtained from the ALSPAC Ethics and Law Committee and the Local Research Ethics Committees.