Supplementary Materials

Table S1: The 10-item Centre for Epidemiological Studies Depression Scale (CES-D) - Questionnaire

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1. I was bothered by things that usually don't bother me
2. I had trouble concentrating in what I was doing
3. I felt depressed
4. I felt everything I did was an effort
5. I felt hopeful about the future
6. I felt fearful
7. My sleep was restless
8. I was happy
9. I felt lonely
10. I could not get going

All questions include four response categories. (1) Rarely or none of the time (less than 1 day), (2) Some or little of the time (1-2 days), (3) Occasionally or a moderate amount of time (3-4 days), and (4) Most or all of the time (5 to 7 days). The responses are assigned a score of 0, 1, 2 and 3 respectively. The scores of questions 5 and 8 are reversed (i.e. 3, 2, 1 and 0 respectively).

Table S2: Distribution of age at which children started to work

Age started to work	Frequency	Percent	Cumulative
4	1	0.33	0.33
5	6	1.96	2.29
6	10	3.27	5.56
7	23	7.52	13.07
8	41	13.4	26.47
9	49	16.01	42.48
10	68	22.22	64.71
11	29	9.48	74.18
12	43	14.05	88.24
13	28	9.15	97.39
14	8	2.61	100
Total	306	100	

Note. This is based on data from IFLS 4 (2007) wave. Information on the age started to work is missing for six child workers.

Table S3: Distribution of age at which children started to work by region and province

Provinces	Mean Age	SD
Region		
Urban	9.7	2.4
Rural	9.6	2.6
Province		
North Sumarta	8.6	1.7
West Sumarta	9.6	2.0
South Sumarta	10.1	2.2
Lampung	10.4	1.0
Jakarta	10.0	2.3
West Java	9.4	3.1
Central Java	9.9	2.2
Yogyakarta	10.8	2.3
East Java	10.0	1.9
Bali	9.4	3.2
West Nusa	9.7	1.9
South Kalimantan	11.7	1.4
South Sulawesi	8.8	5.4

Note. Mean age and SD denote the average age at which children started to work and its standard deviation respectively.

Table S4: Average minimum wage by province

Province	Average minimum wage
North Sumarta	6.23
West Sumarta	5.60
South Sumarta	5.31
Lampung	4.36
Jakarta	6.82
West Java	4.22
Central Java	4.10
Yogyakarta	4.15
East Java	3.54
Bali	4.68
West Nusa	4.89
South Kalimantan	5.55
South Sulawesi	5.36

Note. The average minimum wage denotes the average of the provincial legislated minimum wage for the period under consideration, expressed in hundreds of thousand rupiahs.

Variables	Description
Mental health score	The mental health score based on CES-D-10 scale
Child work	=1 if ever worked for wages or in family business as a child (past month)
Demographics	
Female	=1 if the individual is a female
Age	Age of the individual
Urban	=1 if the household is in an urban area
Marital status	
Married	=1 if married or cohabiting
Divorced	=1 if divorced, separated or widowed
Unmarried*	=1 if unmarried
Work status	
Employed	=1 if working/helping to get an income
Unemployed	=1 if looking for a job or unemployed
Schooling	=1 if a student
House keeping	=1 if a house keeper
Retired or sick*	=1 if retired, sick or disable
Proxies for contemporaneous income	
lnpce	Logarithm of monthly per capita expenditure in 2014
Dependency ratio	The ratio of the number of household members aged below 14 and above 65 years to the number of working members aged 15 - 64 years in 2014
Toilet river/land/sea	=1 if the household does not have proper toilet facilities in 2014
Cook firewood	=1 if the household uses firewood as the main source of energy for cooking in 2014
Proxies for past income	
lnpce 2007	Logarithm of monthly per capita expenditure in 2007
Dependency ratio 2007	The ratio of the number of household members aged below 14 and above 65 years to the number of working members aged 15 - 64 years in 2007
Toilet river/land/sea 2007	=1 if the household does not have proper toilet facilities in 2007
Cook firewood 2007	=1 if the household uses firewood as the main source of energy for cooking in 2007
Body mass index	
Under weight	=1 if the BMI is less than 18.5 kg/m^2
Over weight	=1 if the BMI index is between 23.0 to 25.0 kg/m^2
Obese	=1 if the BMI index is above 25.0 kg/m^2
Normal weight*	=1 if the BMI index is between 18.5 to 22.9 kg/m^2
Childhood adverse events	
Child health	=1 if the health was fair or poor during childhood
Bedridden	=1 if confined to bed or home for one or more months during childhood
Child hunger	=1 if experienced hunger in childhood
Parent smoke	=1 if any of the parents used to smoke at age 12
Parent alcohol	=1 if any of the parents used to drink heavily at age 12
Parent mental problems	=1 if any of the parents had mental problems at age 12
Parents unmarried	=1 if the parents were no longer married at age 12
Stressful events	
Accident injury	=1 if an injury caused by an accident limits the daily activities
Fall injury	=1 if an injury caused by a fall limits the daily activities
Natural disasters (ND)	=1 if the household has experienced any type of a disaster during the last 5 years
Injuries	=1 if the disaster was severe enough to cause death, injury during the last 5 years to household members
Disruption (dis)	=1 if the household has experienced events that caused economic disruptions
Crime	=1 if a household member has been a victim of crime during the past year

Religiosity and social capital

Religious   =1 if the individual is very religious or somewhat religious

Willing to help   =1 if willing to help people in village if needed

Community participation   The percentage of community activities participated within the past year
out of total number of community activities known to the respondent.

Physical health status

Self reported health status   =1 if the reported health status is 'healthy'

Physical activity

Moderate Activity   Number of days per week engaged in moderate activity

Vigorous Activity   Number of days per week engaged in vigorous activity

Walking Activity*   Number of days per week engaged in walking activity

Habits and behavioral factors

Smoke   =1 if ever smoked or chewed tobacco

Still smoke   =1 if it is a current smoker

Fruits   =1 if consumed fruits more than 2 days in the last week

Vegetables   =1 if consumed vegetables more than 2 days in the last week

Soft drinks   =1 if consumed soft drinks in the last week
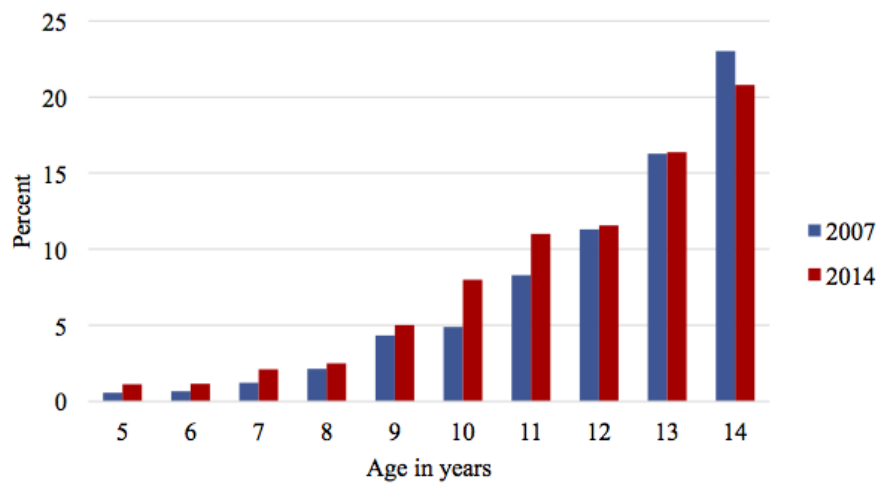
Provincial dummies   Seperate indicator variables for each of the following provinces:
North Sumarta, West Sumarta, South Sumarta, Lampung, Jakarta,
West Java, Central Java, Yogyakarta, East Java, Bali, West Nusa
Tenggara, South Sulawesi and South Kalimantan

Instrument

Minimum wage   The provincial legislated minimum wage in hundreds of thousand rupiahs

Variables marked with * indicates the reference group.

Figure S1: Incidence of child labour by age

Note: This figure is based on data from the total sample of children between 5 to 14 years old in IFLS 4 (2007) and IFLS 5 (2014) waves.

Table S6: Summary Statistics

Variables	Full Sample N=3,842		Child workers N=312		Non child workers N=3,530		Mean Difference
	Mean	SD	Mean	SD	Mean	SD	
Mental health score (min=0, max=26)	7.46	4.63	8.08	4.88	7.41	4.60	0.68***
Demographics							
Female (=1)	0.50	0.50	0.51	0.50	0.50	0.50	0.01
Age (min=14, max=24)	17.62	2.06	18.86	1.88	17.51	2.04	1.35***
Urban (=1)	0.64	0.48	0.56	0.50	0.64	0.48	-0.09***
Marital status							
Married (=1)	0.10	0.30	0.16	0.37	0.09	0.29	0.06***
Divorced (=1)	0.01	0.08	0.00	0.05	0.01	0.08	0.00
Unmarried (=1)	0.89	0.31	0.84	0.37	0.90	0.30	-0.06***
Work status							
Employed (=1)	0.24	0.43	0.42	0.50	0.23	0.42	0.20***
Unemployed (=1)	0.11	0.32	0.12	0.32	0.11	0.32	0.01
Schooling (=1)	0.54	0.50	0.33	0.47	0.56	0.50	-0.22***
House keeping (=1)	0.10	0.30	0.11	0.31	0.10	0.30	0.01
Retired or sick (=1)	0.01	0.08	0.01	0.09	0.01	0.08	0.00
Proxies for contemporaneous income							
lnpce (min=11, max=17)	13.73	0.75	13.64	0.71	13.74	0.75	-0.10**
Dependency ratio (min=0, max=4)	0.35	0.38	0.33	0.34	0.35	0.38	-0.02
Toilet river/land/sea (=1)	0.07	0.26	0.11	0.31	0.07	0.26	0.04***
Cook firewood (=1)	0.19	0.39	0.26	0.44	0.18	0.38	0.08***
Proxies for past income							
lnpce 2007 (min=10, max=16)	12.81	0.64	12.75	0.63	12.81	0.64	-0.06*
Dependency ratio 2007 (min=0, max=5)	1.07	0.69	1.21	0.83	1.06	0.68	0.06***
Toilet river/land/sea 2007 (=1)	0.18	0.38	0.30	0.46	0.17	0.38	0.13***
Cook firewood 2007 (=1)	0.39	0.49	0.56	0.50	0.38	0.48	0.18***
Body mass index							
Under weight (=1)	0.29	0.45	0.20	0.40	0.30	0.46	-0.10***
Over weight (=1)	0.09	0.28	0.13	0.34	0.08	0.28	0.05***
Obese (=1)	0.11	0.31	0.13	0.33	0.10	0.31	0.02
Normal weight (=1)	0.48	0.50	0.50	0.50	0.48	0.50	0.03
Childhood adverse events							
Child health (=1)	0.32	0.47	0.39	0.49	0.32	0.46	0.08***
Bedridden (=1)	0.06	0.24	0.08	0.27	0.06	0.24	0.02
Child hunger (=1)	0.04	0.18	0.05	0.21	0.03	0.18	0.01
Parent smoke (=1)	0.67	0.47	0.66	0.47	0.67	0.47	-0.01
Parent alcohol (=1)	0.05	0.21	0.11	0.31	0.04	0.20	0.06***
Parent mental problems (=1)	0.00	0.05	0.00	0.00	0.00	0.05	0.00
Parents unmarried (=1)	0.14	0.35	0.13	0.35	0.14	0.35	-0.01
Stressful events							
Accident injury (=1)	0.09	0.29	0.11	0.31	0.09	0.29	0.01
Fall injury (=1)	0.08	0.27	0.06	0.24	0.08	0.27	-0.02
Natural disasters (ND) (=1)	0.21	0.41	0.21	0.41	0.21	0.41	0.00
Injuries (=1)	0.03	0.17	0.03	0.17	0.03	0.17	0.00
Disruption (dis) (=1)	0.18	0.39	0.19	0.39	0.18	0.39	0.01
Crime (=1)	0.06	0.24	0.07	0.26	0.06	0.23	0.01
Religiosity and social capital							
Religious (=1)	0.67	0.47	0.69	0.46	0.67	0.47	0.02
Willing to help (=1)	0.99	0.10	0.99	0.08	0.99	0.11	0.00
Community participation (min=0, max=100)	25.14	27.56	30.85	30.24	24.63	27.25	6.22***
Physical health status							

Table S8: Mental health distribution

Quantile	Observations	Mean	SD	Minimum	Maximum
0.25	1,177	2.49	1.34	1	4
0.50	964	5.99	0.78	5	7
0.75	940	9.39	1.12	8	11
0.90	446	12.83	0.82	12	14

Table S9: Robustness check: Different model specifications

	0.25 quantile	0.50 quantile	0.75 quantile	0.90 quantile
Panel A (Demographics + FE)				
Child work	-0.448**	0.760**	1.000***	0.639***
	(0.207)	(0.364)	(0.000)	(0.031)
Observations	4,173	4,173	4,173	4,173
Panel B (+ Income proxies)				
Child work	-0.144	0.953***	0.641***	0.660***
	(0.168)	(0.288)	(0.118)	(0.029)
Observations	3,985	3,985	3,985	3,985
Panel C (+ Childhood adversity)				
Child work	-0.046	0.781***	0.860***	0.244***
	(0.047)	(0.118)	(0.065)	(0.033)
Observations	3,842	3,842	3,842	3,842
Panel D (Original specification)				
Child work	0.035	0.544***	0.874***	0.332***
	(0.048)	(0.044)	(0.080)	(0.044)
Observations	3,842	3,842	3,842	3,842

Notes: *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Robust standard errors in parenthesis, clustered at individual level using the Markov Chain Carlo algorithm (MCMC).

Table S10: Robustness check: Using parental mental health in 2007 as an additional control variable

	0.25 quantile	0.50 quantile	0.75 quantile	0.90 quantile
Child work	-0.110	0.749***	0.739***	0.450***
	(0.071)	(0.073)	(0.034)	(0.036)
Observations	3,842	3,842	3,842	3,842

Notes: *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Robust standard errors in parenthesis, clustered at individual level using the Markov Chain Carlo algorithm (MCMC). All regressions include the full set of control variables denoting demographics, income proxies, adverse and stressful events, religiosity and social capital, physical health status, habits and behavioural factors, *parental mental health in 2007* and provincial fixed effects.