SUPPLEMENTARY TABLES AND FIGURES

Supplementary Appendix Table 1. Additional Sample Characteristics by Gender in the 2012 Constances Study (*N*=18,929)

	Men	Women
Mean CES-D score (SD)	7.47 (7.58)	10.04 (9.34)
Elevated depressive symptoms (%)[a]	31.82	39.85
Mean MMSE score (SD)	28.07 (1.85)	28.13 (1.93)
Mean DSST score (SD)	60.01 (14.40)	65.05 (14.17)
Mean FCRST score (SD)	45.53 (2.89)	46.75 (1.84)
Mean verbal fluency score A (SD)	22.85 (5.91)	23.20 (5.79)
Mean verbal fluency score B (SD)	14.59 (4.80)	15.48 (4.93)
Mean grip strength (SD)	40.05 (8.22)	23.64 (5.49)
Mean walking speed (SD)	2.49 (0.46)	2.61 (0.49)
Mean finger tapping (SD)	62.02 (9.47)	56.90 (10.52)

Abbreviations: CES-D, Center for Epidemiologic Studies Depression Scale; DSST, Digit-Symbol Substitution Task; FCSRT, Free and Cued Selective Reminded Test; MMSE, Mini Mental State Examination; SD, Standard Deviation; SES, Socio-Economic Status.

Notes: [a] As measured by a CES-D score or equal to 16 for men; and superior or equal to 20 for women. Only respondents born between 1950 and 1955 are included in our sample.

Supplementary Appendix Table 2. Effect of Eligibility to the 1959 Berthoin Reform on Average School Leaving Age and Odds of Leaving School After the Age of 16 with Interaction Terms with Family Background in the 2012 French Labour Force Survey (*N*=72,133)

	β	95% confidence intervals	OR	95% confidence intervals
Eligibility to the reform	0.010	-0.1, 0.121	1.362	1.194, 1.555
Low parental SES	-4.369	-4.511, -4.227	0.076	0.062, 0.093
Eligibility*Low parental SES	0.395	0.268, 0.523	1.340	1.195, 1.502

Abbreviations: CI, Confidence Interval ; OR, Odd Ratios ; SES, Socioeconomic Status.

Notes: Family background has been recoded as low *vs.* high or intermediate parental SES. The Ordinary Least Square estimates measure the effect of the reform on average school leaving age. Odd ratios measure the effect of the reform on the odds of leaving school after the age of 16. All models control for age, age squared, gender, month of birth, birth cohort relative to the cut-off point, interacted with the treatment. Standard errors are clustered at the month of birth level. The bandwidth is fixed at 48 months.

Supplementary Appendix Table 3. Effect of Eligibility to the 1959 Berthoin Reform on Standardized Cognitive Scores by Gender in the 2012 Constances Study (*N*=18,929)

	Men		Women	
	β	95% confidence intervals	*β*	95% confidence intervals
MMSE	0.144	0.003, 0.285	-0.057	-0.180, 0.064
DSST	0.067	-0.057, 0.192	0.005	-0.111, 0.121
FCSRT	0.175	0.037, 0.313	0.067	-0.031, 0.167
Verbal fluency A	0.089	-0.050, 0.230	-0.077	-0.204, 0.049
Verbal fluency B	0.015	-0.123, 0.155	0.012	-0.118, 0.144

Abbreviations: DSST, Digit-Symbol Substitution Task; FCSRT, Free and Cued Selective Reminded Test; MMSE, Mini Mental State Examination.

Notes: The table reports z-scores. All models control for age, age squared, month of birth, birth cohort relative to the cut-off point, interacted with the treatment. Standard errors clustered at the month of birth level. The bandwidth is fixed at 48 months.

Supplementary Appendix Table 4. Effect of Eligibility to the 1959 Berthoin Reform on Cognition and Depressive Symptoms with Interactions Terms with Gender and Parental SES in the 2012 Constances Study (*N*=18,929)

	Cognition				Depressive symptoms			
	β	95% CI	OR	95% CI	β	95% CI	OR	95% CI
Gender								
Eligibility to the reform	0.077	-0.024, 0.179	1.235	0.915, 1.668	0.794	-0.012, 1.601	1.196	0.976, 1.465
Female	0.337	0.270, 0.404	1.821	1.509, 2.196	2.499	1.907, 3.090	1.479	1.333, 1.641
Eligibility*Female	-0.031	-0.134, 0.071	0.716	0.524, 0.977	0.153	-0.598, 0.904	0.951	0.826, 1.093
Parental SES								
Eligibility to the reform	0.024	-0.074, 0.122	1.089	0.832, 1.424	0.887	0.005, 1.768	1.178	0.965, 1.437
Low parental SES	-0.503	-0.578, -0.428	0.428	0.354, 0.517	0.489	-0.164, 1.144	1.204	1.057, 1.371
Eligibility*low parental SES	0.199	-0.814, 1.212	1.040	0.827, 1.308	0.295	-0.577, 1.168	1.021	0.851, 1.224

Abbreviations: CI, confidence intervals; SES, Socioeconomic Status.

Notes: Family background has been recoded as low *vs.* high or intermediate parental SES. Odds ratios measure the odds of being in the top quartile of cognitive and physical functioning; and of reporting elevated depressive symptoms based on the CES-D recommended cut-off. All models control for age, age squared, month of birth, birth cohort relative to the cut-off point, interacted with the treatment. Standard errors are clustered at the month of birth level. The bandwidth is fixed at 48 months.

Supplementary Appendix Table 5. Effect of Eligibility to the 1959 Berthoin Reform on Health Outcomes by Parental Socioeconomic Status in the 2012 Constances Study (*N*=18,929)

	High parental SES				Intermediate parental SES				Low parental SES			
	β	95% CI	OR	95% CI	β	95% CI	OR	95% CI	β	95% CI	OR	95% CI
Cognitive score	0.008	-0.134, 0.150	1.190	0.796, 1.780	-0.023	-0.192, 0.145	0.857	0.554, 1.326	0.218	0.044, 0.392	1.579	0.911, 2.737
CES-D score	0.060	-1.872, 1.992	1.090	0.716, 1.658	0.830	-0.284, 1.945	1.209	0.931, 1.570	1.568	0.346, 2.971	1.216	0.969, 1.525
Hand grip strength	-0.976	-3.591, 1.638	1.711	0.889, 3.291	-0.788	-2.123, 0.545	0.895	0.578, 1.387	0.080	-1.151, 1.313	1.056	0.731, 1.526
Finger tapping	-0.309	-2.577, 1.958	0.881	0.432, 1.797	0.069	-1.555, 1.694	0.945	0.597, 1.497	-0.679	-2.287, .928	1.082	0.715, 1.638
Walking speed	-0.001	-0.073, 0.070	1.352	0.687, 2.661	0.023	-0.023, 0.069	0.689	0.455, 1.044	0.017	-0.030, 0.065	1.162	0.884, 1.528

Abbreviations: CES-D, Center for Epidemiologic Studies Depression score; CI, confidence intervals; SES, Socioeconomic Status.

Notes: Odds ratios measure the odds of being in the top quartile of cognitive and physical functioning; and of reporting elevated depressive symptoms based on the CES-D recommended cut-off. All models control for age, age squared, gender, month of birth, birth cohort relative to the cut-off point, interacted with the treatment. Standard errors are clustered at the month of birth level. The bandwidth is fixed at 48 months.

Supplementary Appendix Table 6. Effect of Eligibility to the 1959 Berthoin Reform on Qualifications, Employment and Wages, by Gender and Parental SES during Adolescence in the 2012 French Labour Force Survey (*N*=72,133)

	High school diploma		In employment		Log of hourly wage	
	OR	95% CI	OR	95% CI	β	95% CI
Gender						
Men	0.007	-0.011, 0.027	1.149	1.027, 1.286	0.013	-0.009, 0.035
Women	0.002	-0.017, 0.022	0.993	0.908, 1.086	0.003	-0.027, 0.034
Parental SES						
High parental SES	-0.044	-0.088, 0.001	0.699	0.521, 0.939	-0.010	-0.111, 0.090
Intermediate parental SES	0.001	-0.024, 0.026	0.969	0.850, 1.103	0.026	-0.011, 0.063
Low parental SES	0.005	-0.010, 0.019	1.157	1.062, 1.262	0.001	-0.023, 0.026

Abbreviations: CI, Confidence Intervals; SES, Socioeconomic Status.

Notes: All models control for age, age squared, month of birth, birth cohort relative to the cut-off point, interacted with the treatment. Standard errors clustered at the month of birth level. Bandwidth is fixed at 48 months.

Supplementary Appendix Table 7. Effect of Eligibility to the 1959 Berthoin Reform on Number of Children and Marital Status Among Women in the 2012 Constances Study (*N*=18,929)

	Number of children		Currently married		Divorced	
	β	95% CI	OR	95% CI	OR	95% CI
Effect of eligibility to the reform	-0.056	-0.173, 0.059	1.093	0.905, 1.321	0.840	0.661, 1.067

Abbreviations: CI, Confidence Intervals.

Notes: All models control for age, age squared, month of birth, birth cohort relative to the cut-off point, interacted with the treatment. Standard errors clustered at the month of birth level. Bandwidth is fixed at 48 months.

Supplementary Appendix Table 8. Effect of Eligibility to the 1959 Berthoin Reform on Health Outcomes by Gender with Cubic Term for Age in the 2012 Constances Study (*N*=18,929)

	Men				Women			
	β	95% CI	OR	95% CI	*β*	95% CI	OR	95% CI
Cognitive score	0.132	0.003, 0.260	1.753	1.174, 2.618	-0.019	-0.145, 0.106	0.825	0.606, 1.122
CES-D score	0.229	-0.726, 1.185	1.054	0.834, 1.330	1.496	0.295, 2.696	1.263	1.022, 1.562
Hand grip strength	0.089	-0.881, 1.060	0.945	0.765, 1.168	-0.738	-1.528, 0.051	0.073	0.007, 1.041
Finger tapping	-0.654	-2.067, 0.758	0.887	0.655, 1.200	-0.051	-1.573, 1.470	1.300	0.859, 1.967
Walking speed	-0.025	-0.065, .013	0.769	0.557, 1.062	0.007	-0.036, 0.051	1.102	0.804, 1.509

Abbreviations: CES-D, Center for Epidemiologic Studies Depression score; CI, confidence intervals.

Notes: Odds ratios measure the odds of being in the top quartile of cognitive and physical functioning; and of reporting elevated depressive symptoms based on the CES-D recommended cut-off. All models control for age, age squared, age cubic, month of birth, birth cohort relative to the cut-off point, interacted with the treatment. Standard errors are clustered at the month of birth level. The bandwidth is fixed at 48 months.

Supplementary Appendix Table 9. Effect of Eligibility to the 1959 Berthoin Reform on Health Outcomes by Gender Estimated using Triangular Kernel Weights in the 2012 Constances Study (*N*=18,929)

	Men				Women			
	β	95% CI	OR	95% CI	*β*	95% CI	OR	95% CI
Cognitive score	0.135	0.010, 0.260	1.734	1.162, 2.588	0.022	-0.128, 0.173	0.912	0.628, 1.324
CES-D score	0.199	-0.814, 1.212	1.041	0.818, 1.325	1.452	0.272, 2.632	1.314	1.053, 1.641

Abbreviations: CES-D, Center for Epidemiologic Studies Depression score; CI, confidence intervals.

Notes: Odds ratios measure the odds of being in the top quartile of cognitive and physical functioning; and of reporting elevated depressive symptoms based on the CES-D recommended cut-off. All models control for age, age squared, month of birth, birth cohort relative to the cut-off point, interacted with the treatment. Standard errors are clustered at the month of birth level. The bandwidth is fixed at 48 months.

Supplementary Appendix Figure 1. Association between Educational Attainment and Selected Health Outcomes by Gender in the 2012 Constances Study (*N*=18,929), Birth Cohorts 1950-1956
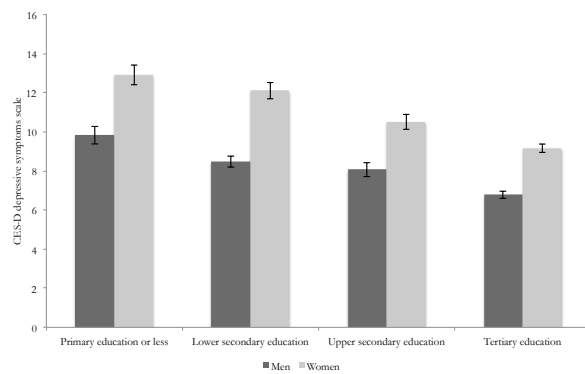
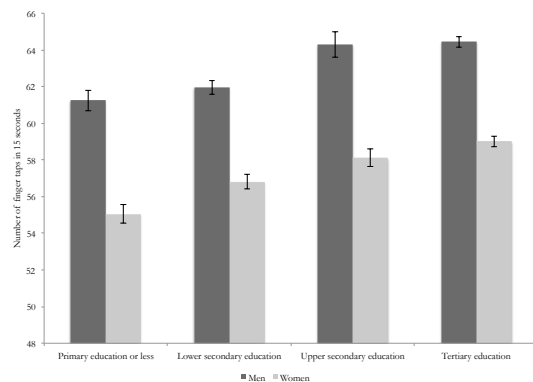**a. Top quartile of cognitive performance**
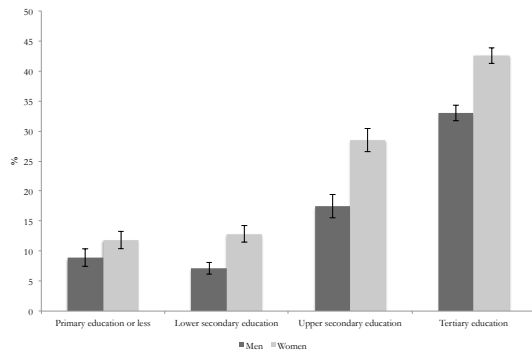
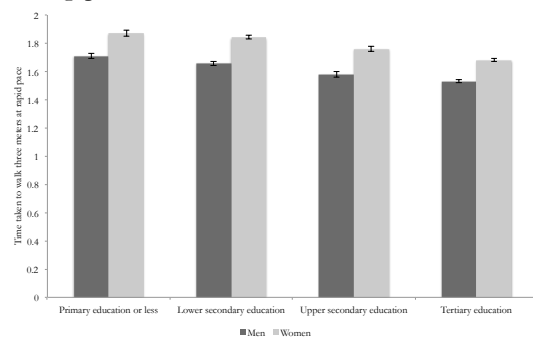**c. Physical functioning**

Grip Strength
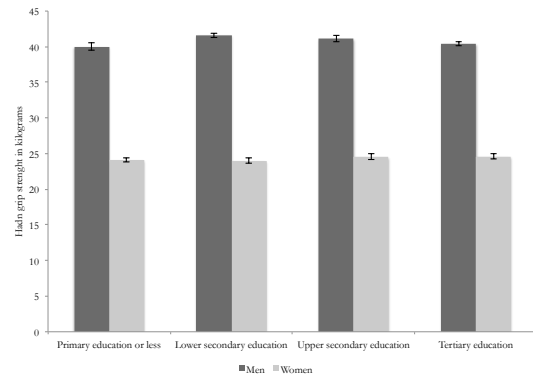
b. CES-D depressive symptoms score

Finger tapping

Walking speed

*Abbreviations:* CES-D, Center for Epidemiologic Studies Depressive Symptoms Scale.
Notes: Predicted means from linear regression models, adjusted for age and age squared. Models for grip strength are further adjusted for height. Robust standard errors.

Supplementary Appendix Figure 2. RDD Estimates from Placebo Schooling Reforms in the 2012 Constances Study (N=72,133)
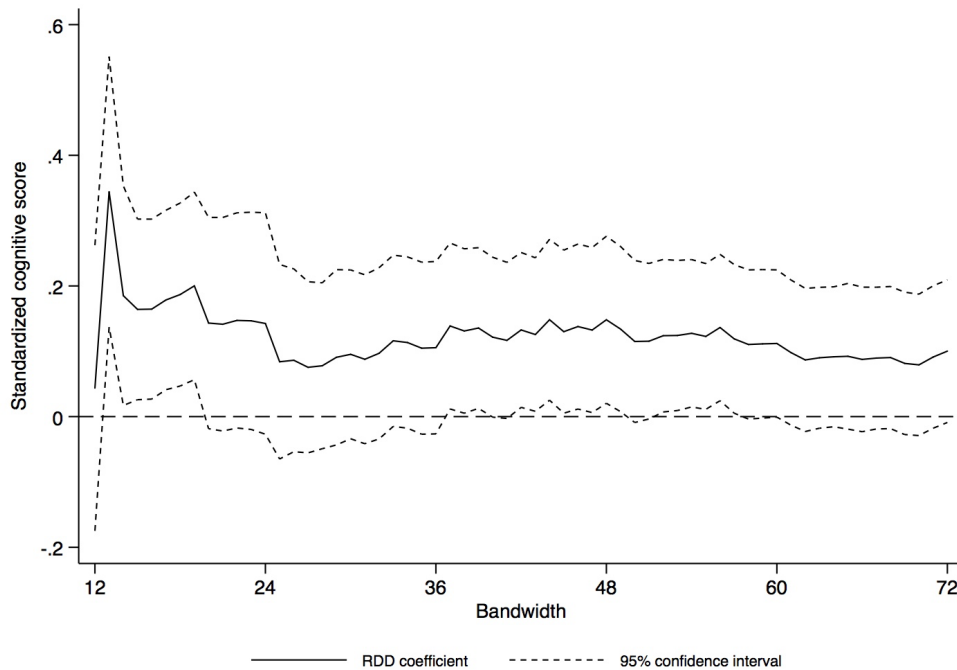
a. Cognition score among men
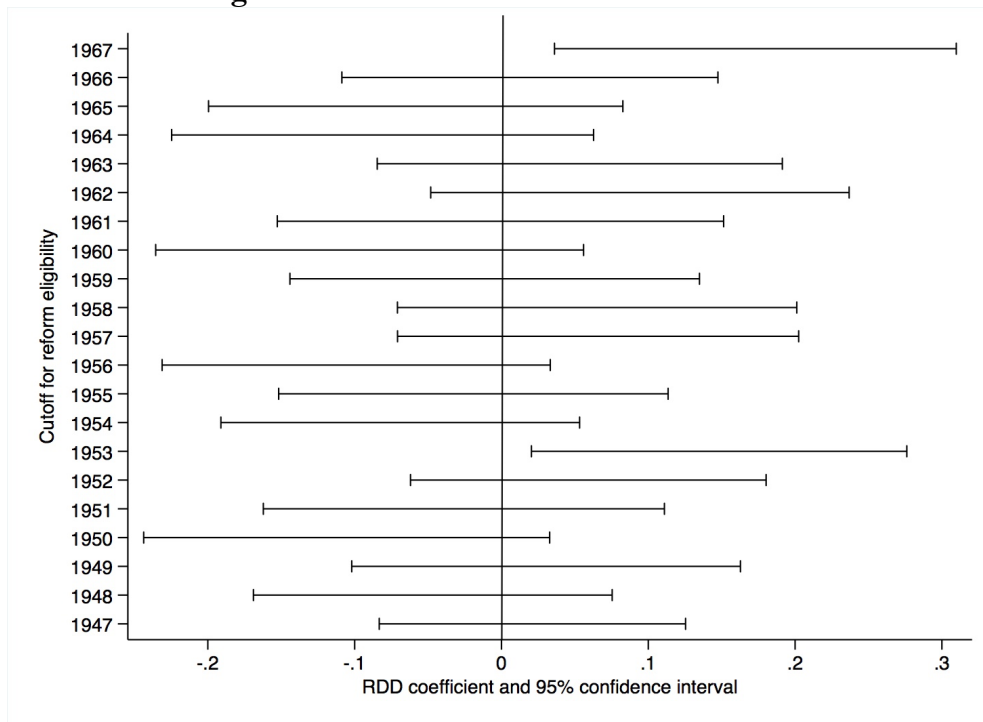
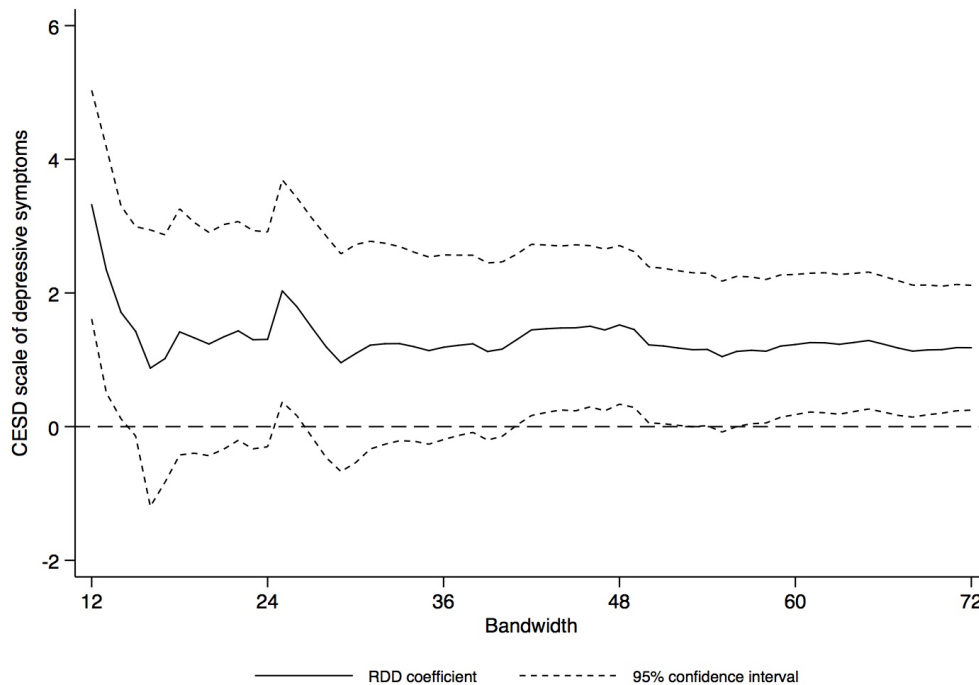**b. CES-D depressive symptoms score among women**
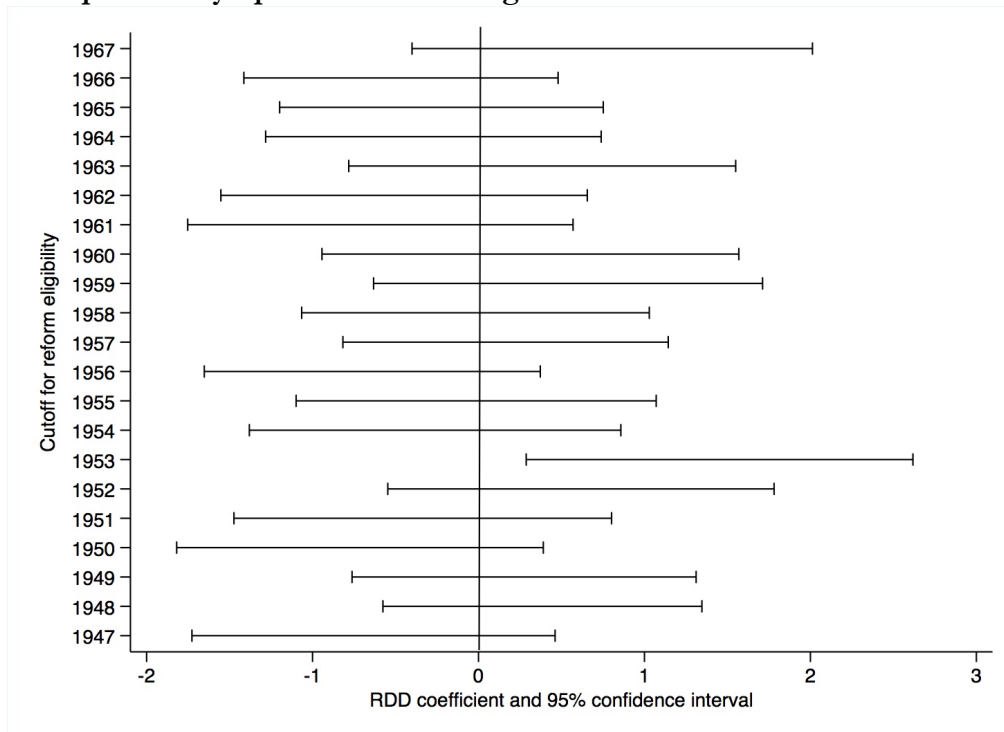
Notes: All models control for age, age squared, month of birth, birth cohort relative to the cut-off point, interacted with the treatment. Standard errors clustered at the month of birth level. The bandwidth is fixed at 48 months.

Supplementary Appendix Figure 3. Effect of Eligibility to the 1959 Berthoin Reform on Cognition and Depressive Symptoms with Different Bandwidth Sizes in the 2012 Constances Study (*N*=72,133)

a. Cognitive score among men

b. CES-D depressive symptoms score among women

Notes: The bandwidth is displayed in months and ranges between 12 and 72 months. All models control for age, age squared, month of birth, birth cohort relative to the cut-off point, interacted with the treatment. Standard errors clustered at the month of birth level.