Impact of free availability of public childcare on labour supply and child development in Brazil

Appendix: Figures and tables

Figure A1: Impact of crèche attendance on weight for age (WFA) (with 5–95% CI)
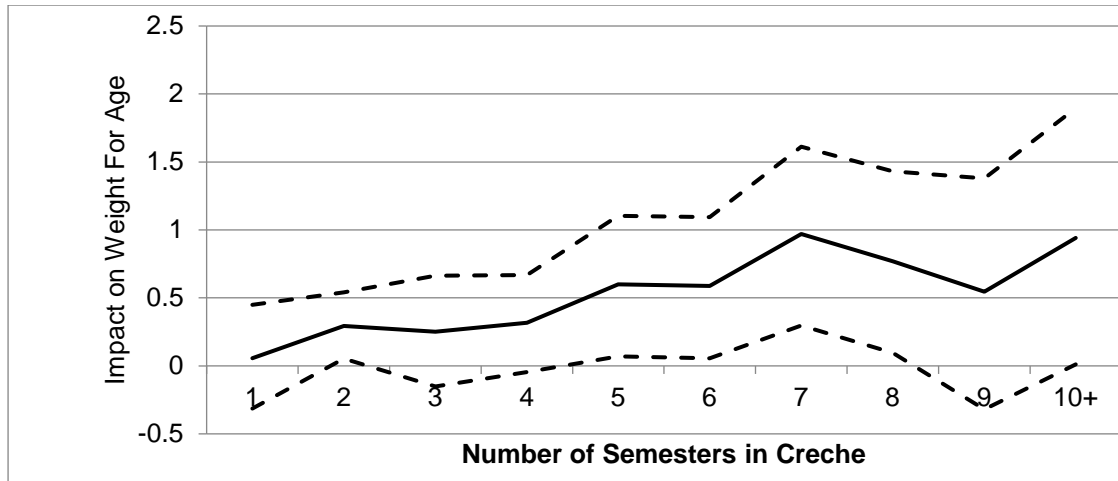

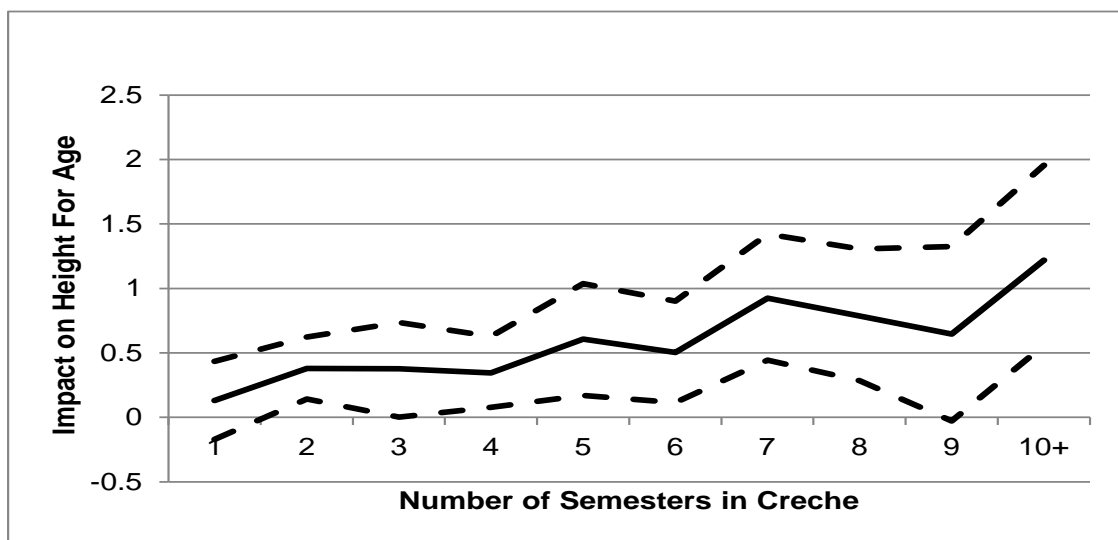**Figure A1: Impact of crèche attendance on height for age (HFA) (with 5–95% CI)**

Figure A2: Impact of crèche attendance on BMI for age (with 5–95% CI)
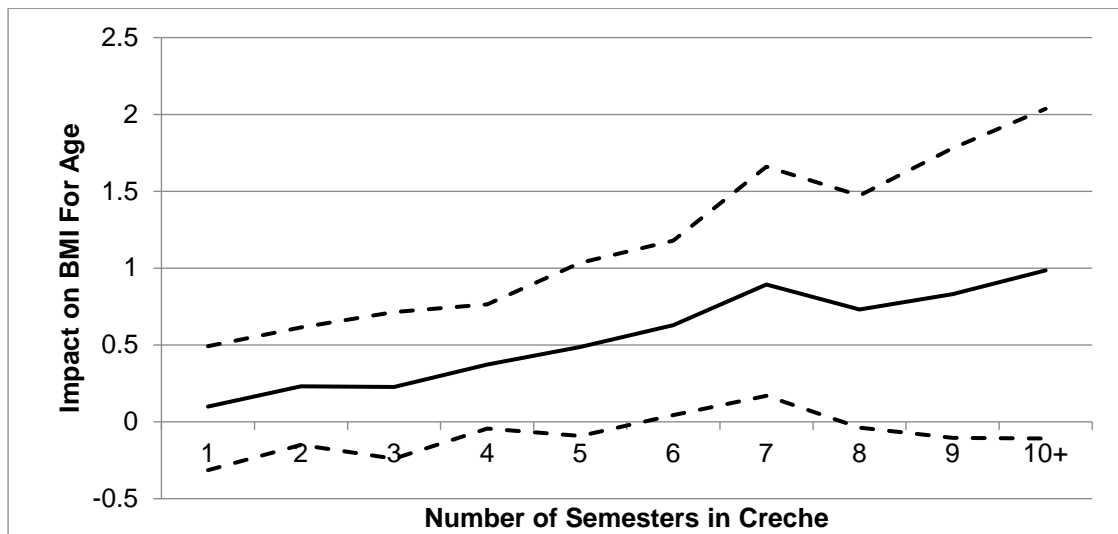

Figure A3: Impact of crèche attendance on cognitive skills (with 5–95% CI)
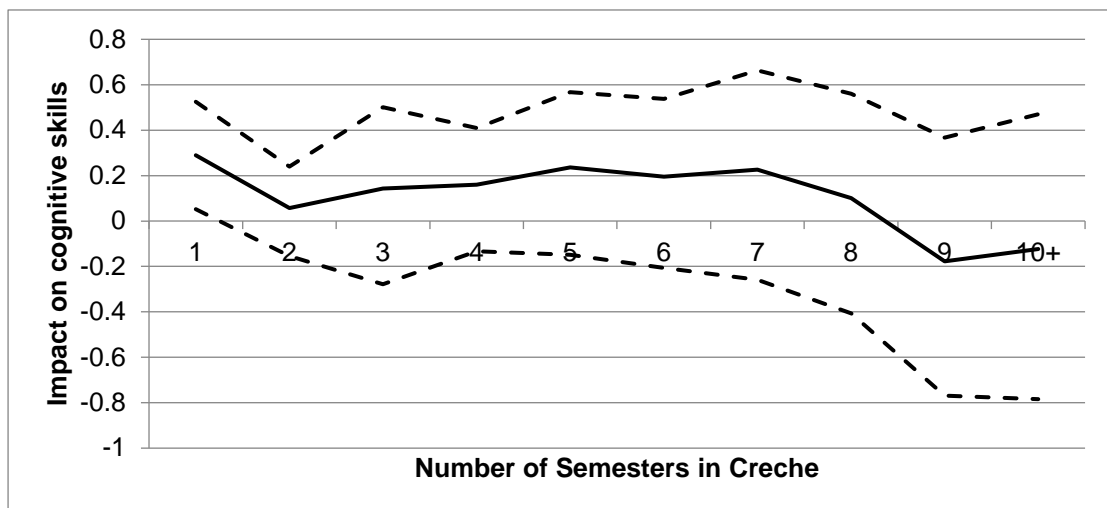
Figure A4: Impact of crèche attendance on executive function (with 5–95% CI)

Figure A5: Impact of crèche attendance on frustration (with 5–95% CI)

Figure A6: Impact of crèche attendance on attention (with 5–95% CI)

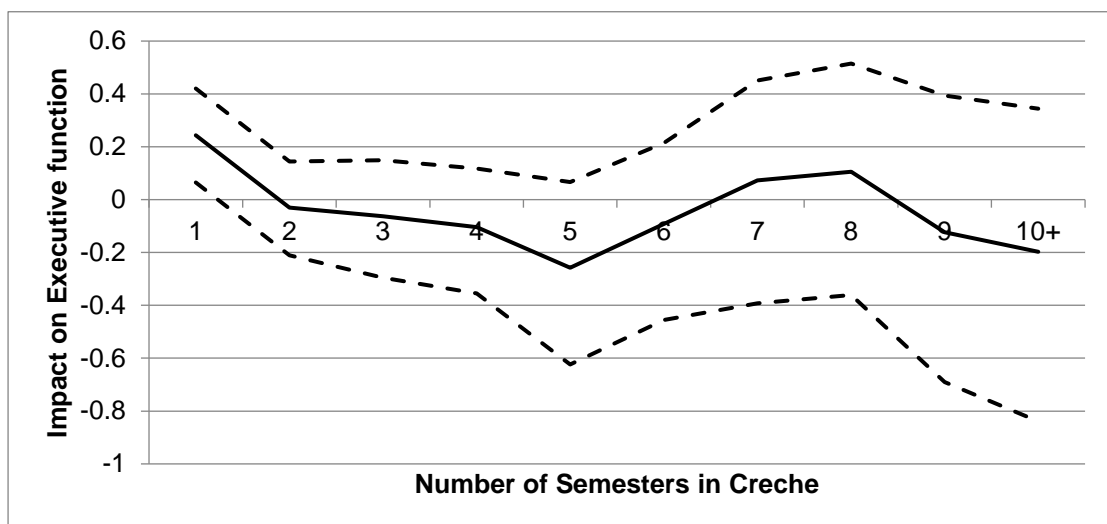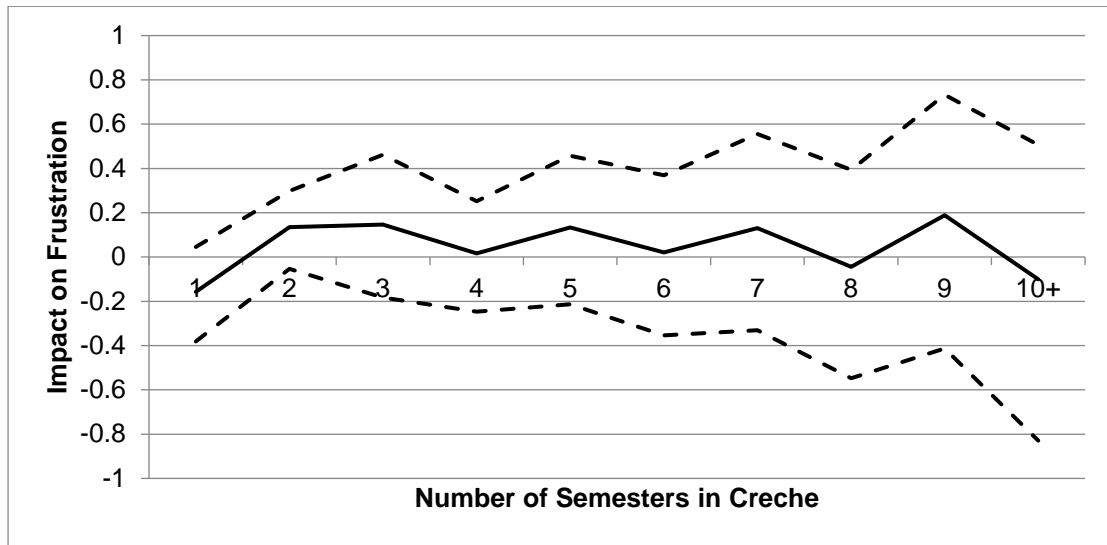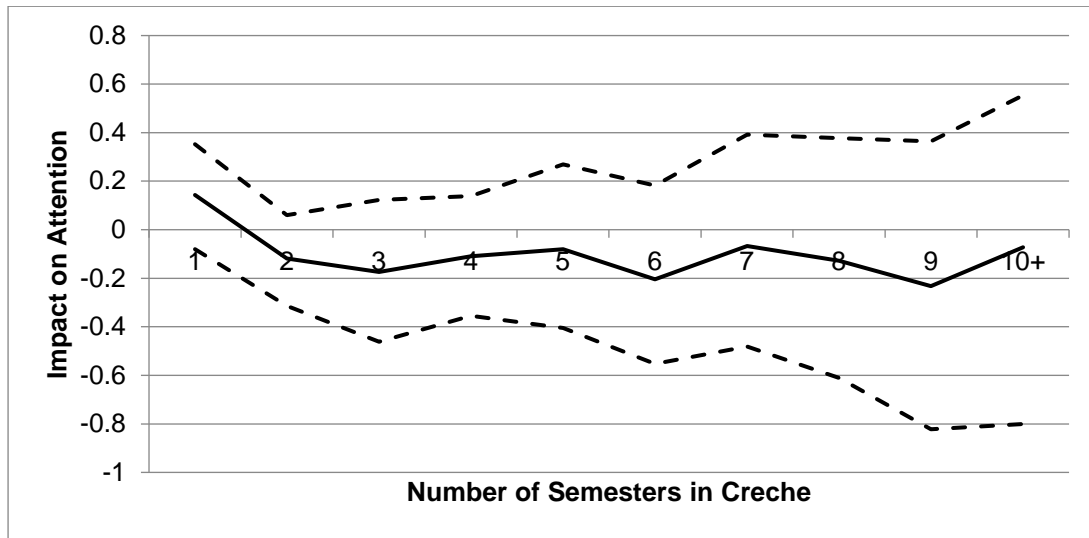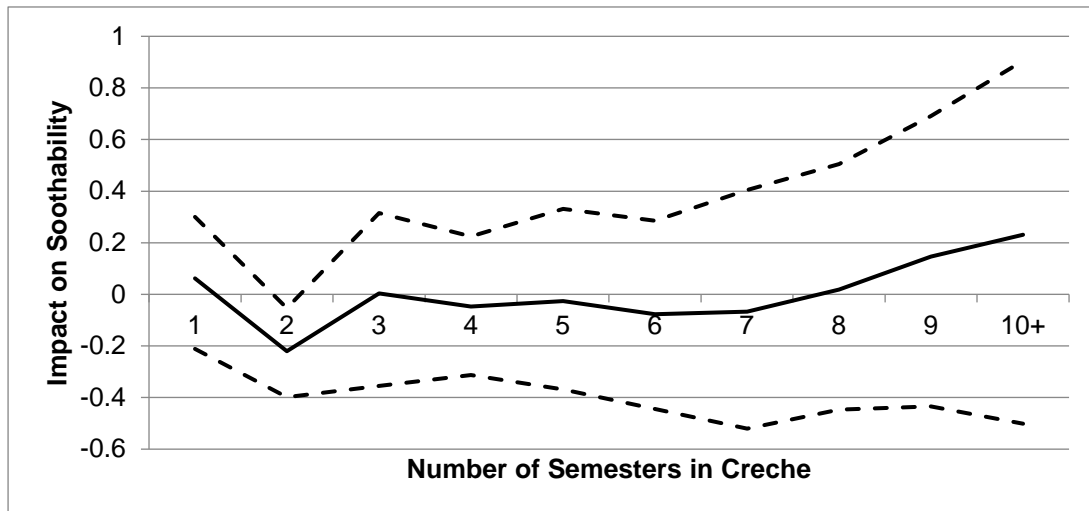**Figure A7: Impact of crèche attendance on soothability (with 5–95% CI)**

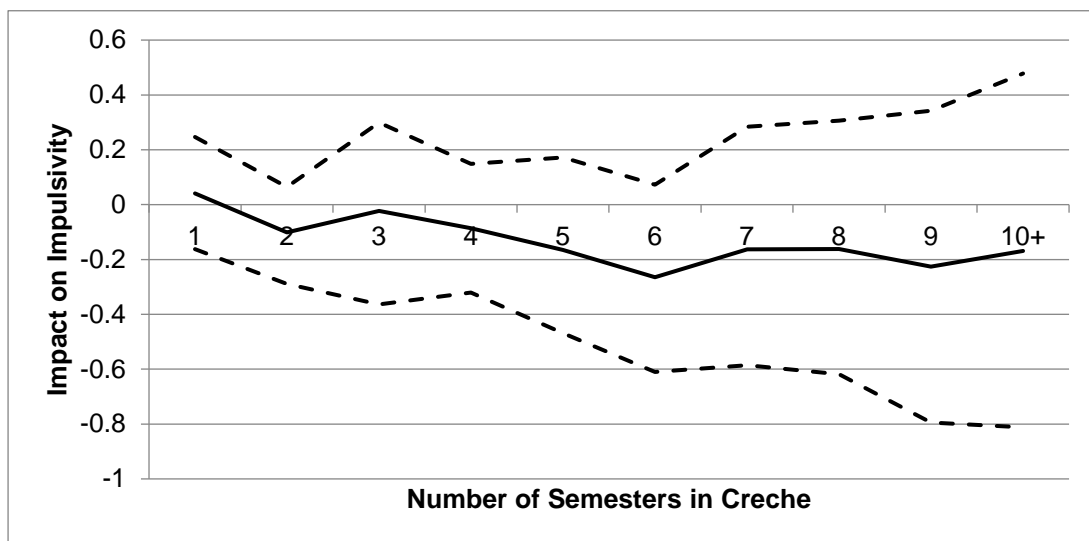**Figure A8: Impact of crèche attendance on impulsivity (with 5–95% CI)**

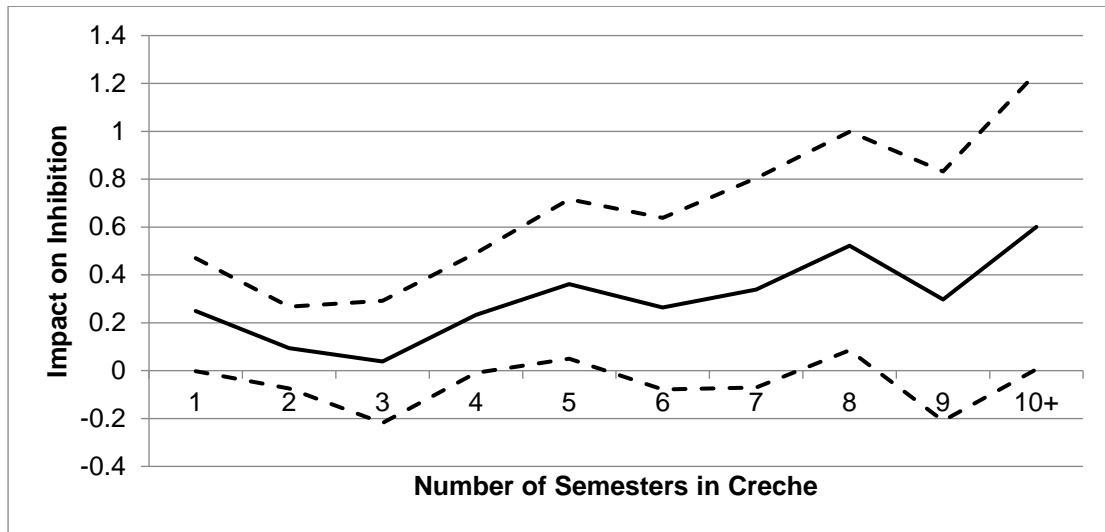**Figure A 9: Impact of crèche attendance on inhibition (with 5–95% CI)**

Table A1: Means and standard deviations of variables for lottery winners and losers

	Loser	Winner	Regression adjusted difference	N
Male child	0.503	0.529	0.0251	3,767
	(0.500)	(0.499)	(0.0176)	
White child	0.328	0.349	0.0197	3,748
	(0.470)	(0.477)	(0.0165)	
Black child	0.117	0.105	−0.0123	3,748
	(0.322)	(0.306)	(0.00980)	
Mixed race child	0.524	0.521	−0.00142	3,748
	(0.500)	(0.500)	(0.0173)	
Other race child	0.0308	0.0258	−0.00599	3,748
	(0.173)	(0.159)	(0.00499)	
Age of the child	2.596	2.626	0.0208	3,776
	(0.864)	(0.862)	(0.0214)	
Birth weight in kilos	3.189	3.206	0.0213	3,742
	(0.615)	(0.612)	(0.0229)	
Birth height in centimetres	49.26	49.29	0.0253	3,722
	(4.056)	(4.233)	(0.125)	
Planned birth	0.329	0.346	0.0165	3,770
	(0.470)	(0.476)	(0.0162)	
Firstborn	0.442	0.426	−0.0156	3,764
	(0.497)	(0.495)	(0.0160)	
Age of the mother at birth	20.28	20.37	0.0819	3,767
	(4.890)	(4.968)	(0.149)	
Prenatal care	0.948	0.944	−0.00370	3,765
	(0.223)	(0.230)	(0.00774)	
Natural birth delivery	0.691	0.662	−0.0275*	3,768
	(0.462)	(0.473)	(0.0150)	
Premature birth	0.121	0.131	0.00885	3,762
	(0.327)	(0.337)	(0.0115)	
Breastfed up to 6 months	0.772	0.751	−0.0211	3,770
	(0.420)	(0.433)	(0.0146)	
Income	879.4	1041.4	149.1	3,646
	(2,047.6)	(4,870.2)	(169.3)	
Family size	4.527	4.670	0.158	3,680
	(3.529)	(4.751)	(0.115)	
Age of carer	29.25	29.15	−0.180	3,776
	(9.768)	(9.157)	(0.317)	
Carer can read and write	0.965	0.982	0.0167***	3,768
	(0.184)	(0.134)	(0.00494)	
Carer has at least basic education	0.676	0.707	0.0326*	3,404
	(0.468)	(0.455)	(0.0185)	
Carer has at least secondary education	0.325	0.356	0.0310*	3,404

	Loser	Winner	Regression adjusted difference	N
	(0.468)	(0.479)	(0.0173)	
Carer has at least higher education	0.0131	0.0151	0.00122	3,404
	(0.114)	(0.122)	(0.00390)	
Highest education grade completed by carer	4.826	4.722	−0.0863	3,346
	(2.373)	(2.371)	(0.0864)	

Note: This table reports pre-lottery variables for lottery winners and losers who were interviewed either in the 2012 or 2015 rounds. In contrast to Table 1, here we use only data from the 3,776 children and their carers interviewed in the 2008 survey. The third data column reports the coefficients of a regression of each variable on lottery status (winner versus loser), which also controls for crèche–age group of lottery fixed effects. The last column reports the number of observations used for each variable. Standard errors are clustered at the crèche level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A2: Means and standard deviations of variables for those in and out of the sample

	Out of the sample	In the sample	Difference	N
Focal child is male	0.523	0.517	−0.00543	22,890
	(0.499)	(0.500)	(0.00835)	
Family income	625.6	619.4	−6.144	23,728
	(2,669.4)	(2,554.0)	(43.59)	
Household size	4.625	4.599	−0.0260	23,934
	(4.022)	(4.320)	(0.0669)	

Table A3: Differences in new definition of crèche enrolment between lottery winners and losers

	Ever been in crèche	Number of semesters in crèche
Lottery winner	0.191***	1.113***
	(0.0210)	(0.112)
Observations	2,387	2,387
F-stat	83.34	97.92

Note: This table reports the impact of being a lottery winner on whether an individual ever attended crèche, and the number of semesters spent in crèche, from regressions of each measure of crèche attendance on an indicator for winning the lottery, and crèche–age group fixed effects. F-stat is the F-statistic on the coefficient on being a lottery winner. Standard errors are clustered at the crèche level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A4: Heterogeneous impacts of winning the lottery on standardised HFA

	(1)	(2)	(3)	(4)	(5)	(6)
Lottery winner	0.108**	0.105	0.131	0.201**	0.126*	0.134
	(0.0454)	(0.0685)	(0.0939)	(0.0849)	(0.0702)	(0.0910)
Lottery winner* is male		0.0147				
		(0.103)				
Lottery winner* is non-white			−0.0262			
			(0.108)			
Lottery winner's* mother has basic education				−0.198*		
				(0.116)		
Lottery winner* child is very poor					−0.0592	
					(0.114)	
Lottery winner* is in childcare before the age of 2						−0.0506
						(0.109)
Observations	2,354	2,354	2,346	2,063	1,985	2,354

Note: This table reports the impact of being a lottery winner (ITT) on z-scores for HFA. We allow these impacts to vary with: sex of the child, race of the child (whether the child is non-white), education of the mother (having more or less than basic education), being below the median household family income in the sample, and entering childcare before the age of two (the last variable is clearly endogenous and presented just for descriptive purposes, while the others were measured either in the lottery registration database (household income) or in the 2008 household survey). All regressions include crèche–age group fixed effects. Standard errors are clustered at the crèche level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A5: Heterogeneous impacts of winning the lottery on standardised WFA

	(1)	(2)	(3)	(4)	(5)	(6)
Lottery winner	0.114**	0.213**	0.158	0.126	0.114	0.223**
	(0.0566)	(0.0858)	(0.131)	(0.102)	(0.0781)	(0.104)
Lottery winner* is male		−0.178				
		(0.121)				
Lottery winner* is non-white			−0.0608			
			(0.153)			
Lottery winner's* mother has basic education				−0.0677		
				(0.148)		
Lottery winner* child is very poor						
					(0.120)	
Lottery winner* is in childcare before the age of 2						−0.145
						(0.129)
Observations	2,167	2,167	2,159	1,914	1,821	2,167

Note: This table reports the impact of being a lottery winner (ITT) on z-scores for WFA. We allow these impacts to vary with: sex of the child, race of the child (whether the child is non-white), education of the mother (having more or less than basic education), being below the median household family income in the sample, and entering childcare before the age of two (the last variable is clearly endogenous and presented just for descriptive purposes, while the others were measured either in the lottery registration database (household income) or in the 2008 household survey). All regressions include crèche–age group fixed effects. Standard errors are clustered at the crèche level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A6: Heterogeneous impacts of winning the lottery on standardised BFA

	(1)	(2)	(3)	(4)	(5)	(6)
Lottery winner	0.123*	0.229**	0.126	0.112	0.106	0.330***
	(0.0639)	(0.0959)	(0.138)	(0.119)	(0.0900)	(0.114)
Lottery winner* is male		−0.198				
		(0.132)				
Lottery winner* is non-white			−0.0118			
			(0.164)			
Lottery winner's* mother has basic education				−0.0436		
				(0.161)		
Lottery winner* child is very poor					(0.131)	
Lottery winner* is in childcare before the age of 2						−0.288**
						(0.143)
Observations	2,349	2,349	2,341	2,059	1,981	2,349

Note: This table reports the impact of being a lottery winner (ITT) on z-scores for BFA. We allow these impacts to vary with: sex of the child, race of the child (whether the child is non-white), education of the mother (having more or less than basic education), being below the median household family income in the sample, and entering childcare before the age of two (the last variable is clearly endogenous and presented just for descriptive purposes, while the others were measured either in the lottery registration database (household income) or in the 2008 household survey). All regressions include crèche–age group fixed effects. Standard errors are clustered at the crèche level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A7: Heterogeneous impacts of winning the lottery on standardised cognitive index

	(1)	(2)	(3)	(4)	(5)	(6)
Lottery winner	0.0171	0.0269	0.222**	0.0767	−0.0497	0.0551
	(0.0422)	(0.0570)	(0.0941)	(0.0769)	(0.0660)	(0.0854)
Lottery winner* is male		−0.0192				
		(0.0833)				
Lottery winner* is non-white			−0.276**			
			(0.112)			
Lottery winner's* mother has basic education				−0.0788		
				(0.0967)		
Lottery winner* child is very poor					`	
					(0.0910)	
Lottery winner* is in childcare before the age of 2						−0.0589
						(0.102)
Observations	1,935	1,935	1,929	1,673	1,628	1,935

Note: This table reports the impact of being a lottery winner (ITT) on z-scores for the cognitive index. We allow these impacts to vary with: sex of the child, race of the child (whether the child is non-white), education of the mother (having more or less than basic education), being below the median household family income in the sample, and entering childcare before the age of two (the last variable is clearly endogenous and presented just for descriptive purposes, while the others were measured either in the lottery registration database (household income) or in the 2008 household survey). All regressions include crèche–age group fixed effects. Standard errors are clustered at the crèche level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A8: Heterogeneous impacts of winning the lottery on standardised executive function

	(1)	(2)	(3)	(4)	(5)	(6)
Lottery winner	0.0119	−0.00487	−0.102	−0.0796	−0.0396	0.0298
	(0.0382)	(0.0564)	(0.0795)	(0.0844)	(0.0694)	(0.0764)
Lottery winner* is male		0.0329				
		(0.0823)				
Lottery winner* is non-white			0.147			
			(0.0925)			
Lottery winner's* mother has basic education				0.170		
				(0.110)		
Lottery winner* child is very poor					`	
					(0.115)	
Lottery winner* is in childcare before the age of 2						−0.0274
						(0.1000)
Observations	2,100	2,100	2,093	1,836	1,766	2,100

Note: This table reports the impact of being a lottery winner (ITT) on z-scores for the executive function index. We allow these impacts to vary with: sex of the child, race of the child (whether the child is non-white), education of the mother (having more or less than basic education), being below the median household family income in the sample, and entering childcare before the age of two (the last variable is clearly endogenous and presented just for descriptive purposes, while the others were measured either in the lottery registration database (household income) or in the 2008 household survey). All regressions include crèche–age group fixed effects. Standard errors are clustered at the crèche level. * p < 0.1, ** p < 0.05, *** p < 0.01.

Table A9: Heterogeneous impacts of winning the lottery on TVIP

	(1)	(2)	(3)	(4)	(5)	(6)
Lottery winner	0.0373	0.0236	0.149*	0.0608	−0.0935	0.144**
	(0.0402)	(0.0557)	(0.0843)	(0.0658)	(0.0581)	(0.0697)
Lottery winner* is male		0.0281				
		(0.0758)				
Lottery winner* is non-white			−0.151			
			(0.0962)			
Lottery winner's* mother has basic education				−0.0527		
				(0.0948)		
Lottery winner* child is very poor					`	
					(0.0834)	
Lottery winner* is in childcare before the age of 2						−0.158*
						(0.0925)
Observations	2,349	2,349	2,341	2,059	1,982	2,349

Note: This table reports the impact of being a lottery winner (ITT) on z-scores for the TVIP. We allow these impacts to vary with: sex of the child, race of the child (whether the child is non-white), education of the mother (having more or less than basic education), being below the median household family income in the sample, and entering childcare before the age of two (the last variable is clearly endogenous and presented just for descriptive purposes, while the others were measured either in the lottery registration database (household income) or in the 2008 household survey). All regressions include crèche–age group fixed effects. Standard errors are clustered at the crèche level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A10: Heterogeneous impacts of winning the lottery on standardised WJ-MEM

	(1)	(2)	(3)	(4)	(5)	(6)
Lottery winner	0.0656*	0.0719	0.192**	0.0745	0.0563	0.0492
	(0.0390)	(0.0537)	(0.0794)	(0.0682)	(0.0674)	(0.0701)
Lottery winner* is male		−0.0272				
		(0.0785)				
Lottery winner* is non-white			−0.172*			
			(0.0944)			
Lottery winner's* mother has basic education				−0.0137		
				(0.0824)		
Lottery winner* child is very poor					`	
					(0.0941)	
Lottery winner* is in childcare before the age of 2						0.0213
						(0.0808)
Observations	2,361	2,361	2,353	2,071	1,990	2,361

Note: This table reports the impact of being a lottery winner (ITT) on z-scores for WJ-MEM. We allow these impacts to vary with: sex of the child, race of the child (whether the child is non-white), education of the mother (having more or less than basic education), being below the median household family income in the sample, and entering childcare before the age of two (the last variable is clearly endogenous and presented just for descriptive purposes, while the others were measured either in the lottery registration database (household income) or in the 2008 household survey). All regressions include crèche–age group fixed effects. Standard errors are clustered at the crèche level. * p < 0.1, ** p < 0.05, *** p < 0.01.

Table A11: Heterogeneous impacts of winning the lottery on standardised WJ-VIS

	(1)	(2)	(3)	(4)	(5)	(6)
Lottery winner	−0.0167	−0.0410	0.0629	0.0527	−0.0542	0.0112
	(0.0391)	(0.0602)	(0.0877)	(0.0790)	(0.0582)	(0.0772)
Lottery winner* is male		0.0505				
		(0.0830)				
Lottery winner* is non-white			−0.104			
			(0.0994)			
Lottery winner's* mother has basic education				−0.0977		
				(0.0983)		
Lottery winner* child is very poor					`	
					(0.0882)	
Lottery winner* is in childcare before the age of 2						−0.0449
						(0.0929)
Observations	2,379	2,379	2,371	2,087	2,006	2,379

Note: This table reports the impact of being a lottery winner (ITT) on z-scores for WJ-VIS. We allow these impacts to vary with: sex of the child, race of the child (whether the child is non-white), education of the mother (having more or less than basic education), being below the median household family income in the sample, and entering childcare before the age of two (the last variable is clearly endogenous and presented just for descriptive purposes, while the others were measured either in the lottery registration database (household income) or in the 2008 household survey). All regressions include crèche–age group fixed effects. Standard errors are clustered at the crèche level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A12: Heterogeneous impacts of winning the lottery on standardised WISC

	(1)	(2)	(3)	(4)	(5)	(6)
Lottery winner	0.0185	0.0103	0.148*	0.0447	0.0213	0.0838
	(0.0437)	(0.0520)	(0.0860)	(0.0676)	(0.0649)	(0.0932)
Lottery winner* is male		0.0172				
		(0.0736)				
Lottery winner* is non-white			−0.181*			
			(0.106)			
Lottery winner's* mother has basic education				− 0.00148		
				(0.0816)		
Lottery winner* child is very poor					`	
					(0.0957)	
Lottery winner* is in childcare before the age of 2						−0.0944
						(0.104)
Observations	2,000	1,986	1,980	1,734	1,683	1,986

Note: This table reports the impact of being a lottery winner (ITT) on z-scores for the WISC. We allow these impacts to vary with: sex of the child, race of the child (whether the child is non-white), education of the mother (having more or less than basic education), being below the median household family income in the sample, and entering childcare before the age of two (the last variable is clearly endogenous and presented just for descriptive purposes, while the others were measured either in the lottery registration database (household income) or in the 2008 household survey). All regressions include crèche–age group fixed effects. Standard errors are clustered at the crèche level. * p < 0.1, ** p < 0.05, *** p < 0.01.

Table A13: Heterogeneous impacts of winning the lottery on standardised STROOP day and night

	(1)	(2)	(3)	(4)	(5)
Lottery winner	0.0679	–0.140	0.0319	–0.244	0.186
	(0.0974)	(0.168)	(0.279)	(0.203)	(0.157)
Lottery winner* is male		0.398*			
		(0.219)			
Lottery winner* is non-white			0.0269		
			(0.321)		
Lottery winner's* mother has basic education				0.432	
				(0.258)	
Lottery winner* child is very poor					`
					(0.239)
Observations	345	345	341	325	294

Note: This table reports the impact of being a lottery winner (ITT) on z-scores for STROOP Day and Night. We allow these impacts to vary with: sex of the child, race of the child (whether the child is non-white), education of the mother (having more or less than basic education), being below the median household family income in the sample, and entering childcare before the age of two (the last variable is clearly endogenous and presented just for descriptive purposes, while the others were measured either in the lottery registration database (household income) or in the 2008 household survey). All regressions include crèche–age group fixed effects. Standard errors are clustered at the crèche level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A14: Heterogeneous impacts of winning the lottery on standardised STROOP Abstract Images

	(1)	(2)	(3)	(4)	(5)
Lottery winner	−0.0412	−0.156	0.0409	−0.386*	−0.193
	(0.120)	(0.164)	(0.216)	(0.203)	(0.195)
Lottery winner* is male		0.218			
		(0.244)			
Lottery winner* is non-white			−0.101		
			(0.263)		
Lottery winner's* mother has basic education				0.448*	
				(0.240)	
Lottery winner* child is very poor					`
					(0.217)
Observations	344	344	340	324	294

Note: This table reports the impact of being a lottery winner (ITT) on z-scores for STROOP Abstract Images. We allow these impacts to vary with: sex of the child, race of the child (whether the child is non-white), education of the mother (having more or less than basic education), being below the median household family income in the sample, and entering childcare before the age of two (the last variable is clearly endogenous and presented just for descriptive purposes, while the others were measured either in the lottery registration database (household income) or in the 2008 household survey). All regressions include crèche–age group fixed effects. Standard errors are clustered at the crèche level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A15: Heterogeneous impacts of winning the lottery on standardised PENCIL

	(1)	(2)	(3)	(4)	(5)
Lottery winner	−0.0239	0.144	0.119	0.0830	−0.134
	(0.105)	(0.111)	(0.310)	(0.223)	(0.178)
Lottery winner* is male		−0.319			
		(0.223)			
Lottery winner* is non-white			−0.206		
			(0.362)		
Lottery winner's* mother has basic education				−0.117	
				(0.283)	
Lottery winner* child is very poor					`
					(0.332)
Observations	299	299	295	281	254

Note: This table reports the impact of being a lottery winner (ITT) on z-scores for PENCIL. We allow these impacts to vary with: sex of the child, race of the child (whether the child is non-white), education of the mother (having more or less than basic education), being below the median household family income in the sample, and entering childcare before the age of two (the last variable is clearly endogenous and presented just for descriptive purposes, while the others were measured either in the lottery registration database (household income) or in the 2008 household survey). All regressions include crèche–age group fixed effects. Standard errors are clustered at the crèche level. * p < 0.1, ** p < 0.05, *** p < 0.01.

Table A16: Heterogeneous impacts of winning the lottery on standardised HTKS

	(1)	(2)	(3)	(4)	(5)	(6)
Lottery winner	0.0455	0.110	–0.0867	–0.133	–0.0204	–0.00474
	(0.0564)	(0.0868)	(0.116)	(0.108)	(0.0941)	(0.0876)
Lottery winner* is male		–0.117				
		(0.126)				
Lottery winner* is non-white			0.175			
			(0.131)			
Lottery winner's* mother has basic education				0.244*		
				(0.136)		
Lottery winner* child is very poor					0.112	
					(0.159)	
Lottery winner* is in childcare before the age of 2						0.0789
						(0.112)
Observations	1,045	1,045	1,042	959	887	1,045

Note: This table reports the impact of being a lottery winner (ITT) on z-scores for HTKS. We allow these impacts to vary with: sex of the child, race of the child (whether the child is non-white), education of the mother (having more or less than basic education), being below the median household family income in the sample, and entering childcare before the age of two (the last variable is clearly endogenous and presented just for descriptive purposes, while the others were measured either in the lottery registration database (household income) or in the 2008 household survey). All regressions include crèche–age group fixed effects. Standard errors are clustered at the crèche level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A17: Heterogeneous impacts of winning the lottery on standardised Colour STROOP

	(1)	(2)	(3)	(4)		(5)	(6)
Lottery winner	−0.0103	−0.104	−0.225	−0.00571		0.0168	0.120
	(0.0704)	(0.0909)	(0.164)	(0.144)		(0.125)	(0.150)
Lottery winner* is male		0.187					
		(0.123)					
Lottery winner* is non-white			0.286				
			(0.185)				
Lottery winner's* mother has basic education				0.0692			
				(0.179)			
Lottery winner* child is very poor					`		
					(0.178)		
Lottery winner* is in childcare before the age of 2							−0.178
							(0.196)
Observations	703	703	703	546		579	703

Note: This table reports the impact of being a lottery winner (ITT) on z-scores for Colour STROOP. We allow these impacts to vary with: sex of the child, race of the child (whether the child is non-white), education of the mother (having more or less than basic education), being below the median household family income in the sample, and entering childcare before the age of two (the last variable is clearly endogenous and presented just for descriptive purposes, while the others were measured either in the lottery registration database (household income) or in the 2008 household survey). All regressions include crèche–age group fixed effects. Standard errors are clustered at the crèche level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A18: Means and standard deviations of variables for lottery winners and losers

	Loser	N	Winner	N
HFA z-score	0.146 (1.215)	1,147	0.245 (1.227)	1,207
WFA z-score	0.0730 (1.400)	1,054	0.168 (1.380)	1,113
BFA z-score	–0.112 (1.770)	1,146	–0.0133 (1.718)	1,203
Aggregate score	–0.0163 (1.004)	939	0.0153 (0.993)	996
Executive function	–0.0103 (0.970)	1,007	0.00946 (1.024)	1,093
Frustration	0.00353 (0.991)	1,159	–0.00335 (1.001)	1,221
Attention	0.0112 (1.013)	1,159	–0.0107 (0.980)	1,221
Soothability	0.00588 (1.016)	1,159	–0.00558 (0.977)	1,221
Impulsivity	0.0236 (0.994)	1,159	–0.0224 (0.998)	1,221
Inhibition	–0.0309 (0.994)	1,159	0.0293 (0.998)	1,221
Household income	1,381.9 (1,147.8)	1,161	1,462.5 (1,261.3)	1,226
Food expenditure	582.8 (299.2)	1,124	605.0 (323.0)	1,188
Anyone with bank account	0.562 (0.496)	1,160	0.609 (0.488)	1,221
Anyone with credit card	0.421 (0.494)	1,159	0.432 (0.496)	1,221
Standardised asset index	–0.0440 (1.001)	1,161	0.0417 (0.997)	1,226

	Loser	N	Winner	N
Frequent reading to child	0.588 (0.492)	1,160	0.633 (0.482)	1,224
Number of books in household	6.567 (6.596)	1,159	7.098 (7.014)	1,220
Income of parent	740.1 (710.3)	1,747	764.3 (773.9)	1,884
Parent works	0.769 (0.421)	1,734	0.772 (0.420)	1,874
Parent's hours of work	32.40 (22.38)	1,663	32.14 (22.56)	1,780
Parent pays social security	0.506 (0.500)	1,732	0.503 (0.500)	1,868
Income of sibling	197.1 (368.3)	235	205.2 (352.7)	268
Sibling works	0.359 (0.481)	234	0.419 (0.494)	267
Sibling's hours of work	14.63 (21.71)	227	15.05 (20.92)	259
Sibling pays social security	0.184 (0.388)	234	0.182 (0.386)	264
Income of uncle	400.4 (506.3)	222	353.8 (522.6)	211
Uncle works	0.617 (0.487)	214	0.574 (0.496)	204
Uncle's hours of work	24.65 (22.93)	193	24.38 (24.55)	192
Uncle pays social security	0.416 (0.494)	214	0.393 (0.490)	201
Income of grandparent	434.7 (685.2)	326	558.9 (824.6)	297
Grandparent works	0.537	326	0.593	295

	Loser	N	Winner	N
	(0.499)		(0.492)	
Grandparent's hours of work	20.57	302	23.98	280
	(23.59)		(24.47)	
Grandparent pays social security	0.313	323	0.444	293
	(0.464)		(0.498)	
Income of carer	504.1	1,107	539.1	1,181
	(607.9)		(637.2)	
Carer works	0.583	1,095	0.620	1,170
	(0.493)		(0.486)	
Carer's hours of work	20.95	1,066	22.26	1,136
	(21.68)		(22.11)	
Carer pays social security	0.353	1,095	0.365	1,167
	(0.478)		(0.482)	

Table A19: Impacts of attending crèche on height, weight, BMI and cognitive and executive function assessments (use new definition of crèche attendance)

	HFA z-score	WFA z-score	BFA z-score	Cognitive z-score	Exec. function z-score
A					
ITT					
Lottery winner	0.108**	0.114*	0.123*	0.0221	0.0119
	(0.0475)	(0.0593)	(0.0669)	(0.0445)	(0.0402)
B					
IV					
Number of semesters	0.0966**	0.102*	0.110*	0.0152	0.0110
in crèche	(0.0418)	(0.0541)	(0.0613)	(0.0394)	(0.0372)
Ever been in crèche	0.562**	0.621*	0.640*	0.0878	0.0606
	(0.247)	(0.329)	(0.352)	(0.227)	(0.204)
Observations	2,354	2,167	2,349	1,935	2,100

Note: Table A19A reports the impact of being a lottery winner (ITT) on z-scores for physical and cognitive measures, from regressions of each of these measures on an indicator for winning the lottery, and crèche–age group fixed effects. Table A19B reports IV estimates of the impact of day care attendance on outcomes, based on two different measures used in two different regressions: the number of semesters spent in crèche, and of having ever attended crèche. When constructing these crèche measures, we recode to non-attendance all instances where the child is reported as attending crèche above four years of age. Standard errors are clustered at the crèche level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A20: Impacts of attending crèche on household outcomes

	Household income	Food expenditure	Anyone with bank account	Anyone with credit card	Standardised asset index
Lottery winner	64.06	15.13	0.0403	0.00162	0.0372
	(41.82)	(14.94)	(0.0247)	(0.0212)	(0.0354)
Lottery winner's* carer is grandmother	386.0*	33.75	0.111*	0.0455	0.107
	(210.4)	(65.56)	(0.0668)	(0.0860)	(0.124)
Lottery winner's* carer is father	205.3	12.08	0.0123	0.0142	0.229
	(256.7)	(80.70)	(0.114)	(0.115)	(0.198)
Lottery winner's* carer is other	−63.66	83.87	−0.0681	0.190**	0.109
	(290.2)	(66.11)	(0.100)	(0.0843)	`
Observations	2,287	2,215	2,281	2,280	2,287

Note: This table reports the impact of being a lottery winner (ITT) on various household economic outcomes, from regressions of each of these measures on an indicator for winning the lottery, and crèche–age group fixed effects. We interact winning the lottery with whether, at baseline, the carer was either the focal child's grandmother, the father or another. Along with the mother (the omitted category), these were the only possible categories for carers at baseline. Standard errors are clustered at the crèche level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A21: Impacts of attending crèche on additional household outcomes

	Years since receiving last toy	Hours watching TV	Time playing with child	Time caring for child	Time playing and caring
ITT					
Lottery winner	−0.0133	0.29	0.0236	0.125	0.159
	(0.0246)	−0.333	(0.0463)	(0.103)	(0.121)
Observations	2,357	2,373	2,271	2,342	2,249

Note: This table reports the impact of being a lottery winner (ITT) on years since the child last received a toy, hours spent by the child watching TV in the previous week, hours spent by the carer playing with the child in a typical day, hours spent by the carer caring for the child (feeding, clothing, bathing) in a typical day, and the sum of play and care time (the latter two variables), from regressions of each of these measures on an indicator for winning the lottery, and crèche–age group fixed effects. Panel B reports IV estimates of the impact of day care attendance on outcomes, based on two different measures used in two different regressions: the number of semesters in crèche, and of having ever attended crèche. Standard errors are clustered at the crèche level. * p < 0.1, ** p < 0.05, *** p < 0.01.

Table A22: Impacts of attending crèche on height, weight, BMI and cognitive and executive function assessments (include correction for attrition)

	HFA z-score	WFA z-score	BFA z-score	Cognitive z-score	Exec. function z-score
A0 **ITT**					
Lottery winner	0.102**	0.095	0.107	−0.012	0.03
(5–95% CI	(0.028,0.177)	(−0.001,0.186)	(−0.001,0.213)	(−0.091,0.069)	(−0.040,0.097)
Observations	2,354	2,167	2,349	1,935	2,100

Note: This table reports the impact of being a lottery winner (ITT) on z-scores for HFA, WFA, BFA, an aggregate of cognitive scores and an aggregate of executive function scores, from regressions of each of these measures on an indicator for winning the lottery and crèche–age group fixed effects. We control for selective attrition using a control function estimator, where the exclusion restrictions are interviewer fixed effects (for the 2008 interview). Confidence intervals (5–95%) are bootstrapped, and we cluster at the crèche level. * p < 0.1, ** p < 0.05, *** p < 0.01.

Table A23: Impacts of attending crèche on indices of labour supply and income of household members (include correction for attrition)

		Family member				
		Parent	Sibling	Uncle or aunt	Grandparent	Carer
A ITT						
Impact of winning the lottery on:	Monthly income	36.87	56.25*	4.422	217.3***	40.68*
		(25.94)	(33.15)	(53.37)	(77.63)	(21.97)
	N	3,631	503	433	623	2,288
	Current employment	0.00978	0.0905*	−0.0583	0.152***	0.0401**
		(0.0140)	(0.0475)	(0.0603)	(0.0510)	(0.0189)
	N	3,608	501	418	621	2,265
	Hours of work per week	0.0787	0.685	1.245	`	1.514*
		(0.680)	(2.215)	(3.128)	(2.444)	(0.800)
	N	3,443	486	385	582	2,202
	Contributing to social sec.	0.00201	0.0362	−0.00965	0.185***	0.0100
		(0.0168)	(0.0340)	(0.0546)	(0.0533)	(0.0201)
	N	3,600	498	415	616	2,262
B IV						
Impact of the number of semesters spent in crèche on:	Monthly income	30.69	2.344	7.208	188.0*	35.22*
		(20.65)	(4.858)	(1,175.0)	(108.3)	(20.25)
	N	3,631	3,440	433	623	2,288
	Current employment	0.00820	0.0286	−0.122	0.131**	0.0351**
		(0.0117)	(0.0182)	(2.315)	(0.0631)	(0.0178)
	N	3,608	1,642	418	621	2,265
	Hours of work per week	0.0657	0.426	2.955	7.934	1.303*
		(0.540)	(0.688)	(244.6)	(6.021)	(0.710)
	N	3,443	1,623	385	582	2,202
	Contributing to social sec.	0.00169	0.00264	−0.0188	0.158	0.00877
		(0.0139)	(0.00871)	(0.455)	(0.0995)	(0.0168)
	N	3,600	1,639	415	616	2,262
Impact of having ever attended a crèche on	Monthly income	198.3	16.68	32.72	1,032.3**	219.1*
		(142.8)	(35.37)	(30,047.4)	(407.2)	(125.2)
	N	3,631	3,440	433	623	2,288
	Current	0.0528	0.207	−0.468	0.726**	0.217**

		Family member				
		Parent	Sibling	Uncle or aunt	Grandparent	Carer
	employment	(0.0720)	(0.133)	(1.207)	(0.330)	(0.101)
	N	3,608	1,642	418	621	2,265
	Hours of	0.424	3.039	11.39	46.20**	8.202*
	work per week	(3.937)	(4.729)	(156.6)	(18.74)	(4.904)
	N	3,443	1,623	385	582	2,202
	Contributing	0.0108	0.0194	–0.0769	0.877**	0.0545
	to social sec.	(0.0919)	(0.0657)	(4.617)	(0.388)	(0.101)
	N	3,600	1,639	415	616	2,262

Note: Table A23A reports the impact of being a lottery winner (ITT) on four labour market variables constructed for five types of household members. Each estimate corresponds to a different regression of each measure defined for each type on an indicator for winning the lottery, and crèche–age group fixed effects. Table A23B reports IV estimates of the impact of day care attendance on outcomes, based on two different measures used in two different regressions. Standard errors are clustered at the crèche level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.