

The Socio-Economic Gradient of Child Development: Cross-Sectional Evidence from Children 6-42 Months in Bogota: On-line Appendix

Appendix 1: Sampling Strategy

Residential blocks in Bogota are classified in six ‘estratos’ according to their location (such as industrial, commercial, residential, and marginalized areas), quality of streets and pavements, accessibility to households, and housing quality (materials of roofs and front walls, size of the façade, parking, and garden). In practice, blocks in the same ‘estrato’ are geographically concentrated, and separate from those in different ‘estratos’ (see Figure A1). In addition, official administrative data from the 2005 Census and the 2011 Cadastre indicate that both family size and fertility rates monotonically decrease by ‘estrato’. Hence, it was deemed important to sample households in each of the first four ‘estratos’ independently in order to obtain a sample representative of low- and middle-income levels.

We followed a three stage sampling process. First, we stratified the city by ‘estrato’ and randomly sampled neighborhoods (primary sampling unit) within them, weighting by the proportion of women in fertile age (13-49 years). Second, within each neighborhood, we randomly sampled three blocks (secondary sampling unit), also weighting by the proportion of women in fertile age.¹ Third, in each selected block, we carried out a mini-census (door-to-door sampling) to identify households with children (tertiary sampling unit) in the eligible age ranges. To ensure a uniform age distribution, we stratified eligible children in a block in age categories: 6-14, 15-23, 24-32, and 33-41 months. Based on the 2005 Census, we expected to find ten eligible children per block and age group on average, of which eight were included in the study by random draw. We assumed a rejection rate of 25 percent. Anticipating less eligible children and higher rejection rates in E4, we decided to include *all* children satisfying the inclusion criteria in the blocks in this ‘estrato’. We excluded one child with mental disabilities and one pair of twins. In addition, in the four households where there was more than one child satisfying the inclusion criteria, we selected which to include at random.

The original sample design was balanced across age groups and ‘estrato’, with 90 children in each stratum-age cell for a total of 1,440 children in 240 blocks. These sample sizes would allow detecting differences of 0.415 SD of a z-score amongst stratum-age groups at 80 percent power and 5 percent significance. However, as soon as field operations started, it was clear that households living in E4 were extremely reluctant to participate in the survey, mostly because of apparent mistrust. Moreover, relative to the data in the 2005 Census, we found a much reduced number of children per block. Hence, we modified the sample structure in two ways. Firstly, we increased the number of blocks sampled. Secondly, to compensate for the loss of children in E4 we increased the number of children in E1 and E2 by 90 each. In addition, mindful of the larger degree of heterogeneity in SES to be found in E3, we oversampled this ‘estrato’ by adding 180 children. As a result, our new target sample was 450 children in E1, 450 children in E2, and 540 children in E3, for a total of 1,440 children ages 6-42 months in 240 blocks.

¹ Because of budget and logistical constraints, neighborhoods and blocks with a higher proportion of women in fertile age had a higher probability of being included in the sample.

Appendix 2: Data Collection Strategy

Once identified, all selected children in a block were assigned to one of the eight interviewers we had trained (all female). Data was collected in two subsequent stages:

(i) *Household Survey*: the interviewer interviewed the biological mother of the child in the household. The survey collected basic socio-economic information on the household and dwelling characteristics (such as demographic composition, education level and employment status for household members, and assets), and formal and informal child care arrangements. It also included UNICEF's *Family Care Indicator* (FCI, Frongillo, Sywulka, and Kariger 2003) which collects the number of newspapers, magazines and books for adults in the household, the types of toys the child usually plays with, and the types of play activities the child engaged in with an adult over the seven days before the interview.

(ii) *Administration of the Bayley-III and Anthropometric Measurements*: upon completion of the household survey, mother and interviewer set an appointment for Bayley-III administration and to collect height and weight on both mother and child.

These measures were collected by six qualified psychologists ('testers') in the 'BiblioRed' library or public child care center ('Jardín Social') closest to the child's home. This ensured that all children were tested in a quiet (without distractions) and large enough room (about three m²) that could comfortably fit all materials required for administration.

'BiblioRed' libraries and 'Jardines Sociales' are well-spread all over the city, which contributed to minimizing differential sample loss between the survey and the Bayley-III test by 'estrato'. In return for lending us their facilities, we offered workshops on parenting and child rearing practices to the centers'/libraries' staff and parents. Tested children were given a set of picture books and nutritional supplements (vitamins and minerals) for daily consumption over three months as a present. The mother received feedback on her child's performance in the test, brochures on parenting and \$10,000 pesos (about \$5.6 US) to compensate for travel costs to the testing site.

Door-to-door sampling activities were scheduled two weeks ahead of the household survey to ensure that there would be enough children to be interviewed in a block. Similarly, we aimed to administer the Bayley-III within a week of the household survey. We strictly monitored the ages and 'estratos' of all tested children to guarantee a final well-balanced sample (in terms of age and 'estrato') by interviewer/tester and over the data collection period. These measures aimed to minimize biases due to any interviewer/tester differences.

Appendix 3: The Bayley Scales of Infant and Toddler Development

We use the third version of the *Bayley Scales of Infant and Toddler Development* (Bayley-III, Bayley 2006). The scales, widely used internationally, have been well-validated in the US and show good predictive ability of later development and academic achievement. The test consists of five scales:

(i) The *Cognitive Scale* primarily requires non-verbal responses from the child. It measures learning processes, problem solving, attention, counting and classification, and playing skills, amongst others.

(ii) The *Language Scale* comprises the language receptive and expressive sub-scales. The first measures the child's ability to respond to stimulus in the environment, words and requests. The latter assesses the child's vocalizations and use of words and sentences.

(iii) The *Motor Scale* is also divided in the fine and gross motor sub-scales. The first measures hand and fingers, and hand and eye coordination. The latter measures the child's control of her body and movement of the torso and extremities.

(iv) The *Socio-Emotional Scale* measures social and emotional milestones, such as self-regulation, communication needs, how the child relates and interacts with familiar and non-familiar people, attention, and other temperament and social behavior aspects.

(v) The *Adaptive Behavior Questionnaires* measure daily functional abilities of the child in ten different areas: communication, community use, functional pre-academics, home living, health and safety, leisure, self-care, self-direction, social, and motor.

The scales are administered and scored independently, producing domain-specific assessments. The first three consist of a series of tasks (items) of increasing difficulty that the child has to perform.² The socio-emotional scale and adaptive behavior questionnaires are based on maternal (or caregiver) reports.

We administered all scales except the adaptive behavior questionnaire, which was excluded because of time constraints. Furthermore, some items appeared to be culturally inappropriate. Administration times vary depending on the child's characteristics. On average, we took between 55 to 110 minutes to administer the complete test.

We translated the test to Spanish and then back-translated into English to ensure linguistic and functional equivalence. We piloted the translation intensively and made minor modifications (wording and phrasing) in order to guarantee that the items would be well understood. N =20 children across the entire age range were tested a second time between six and 19 days after the first test (median of eight days) by either the trainer or one of the three best testers to compute test-retest reliabilities. Test-retest intra-class correlations vary from $r = [0.96-0.98]$ for the cognitive, language (expressive and receptive), and motor (fine and gross) scales, and $r = 0.88$ for the socio-emotional questionnaire, indicating that the translated versions offered stable measurements over time. Chronbach alphas report an internal consistency of 0.86-0.97, depending on the sub-scale.

We trained six female Psychology graduates on the Bayley-III during six weeks, including 20-25 practice administrations per tester. Some of them had previous experience testing. The testers practiced in couples and inter-rater reliabilities were computed. Practice testing continued until an intra-class correlation of over 0.9 was obtained on each scale, between each pair of testers, and between the tester and the trainer, who supervised the process throughout. Furthermore, 5 percent

² For premature children, we did not adjust age by weeks of gestation but, instead, started premature children at the corresponding unadjusted start point and let them go back as required given their developmental level. While this may increase testing time, it deals with potential inaccurate mother/caregiver reports on gestational age. Indeed, we observe nine percent mismatches in reported weeks of gestation between household and Bayley-III surveys (over 50 percent of those reported as premature). Results are robust to controlling for prematurity in the analysis (see Table A9).

of the measurements during field activities were supervised by the trainer and corrective feedback was given when appropriate. The intra-class correlations between tester and trainer scores during these tests were all well above 0.9, ensuring high data quality. Nonetheless, we include tester effects in the analysis to control for any unobserved differences in the administration or scoring of the test by the testers and to reduce statistical variance.

Appendix 4: Internal Standardization of Scores Using Age-Conditional Means and SDs

For each sub-scale in the Bayley-III—cognition, receptive language, expressive language, fine motor, gross motor, and socio-emotional—we compute the age-conditional mean using the fitted values of the following regression, estimated by OLS:

$$(2) \quad Y_i = \alpha + \beta X_i + \varepsilon_i \quad \forall i$$

where Y_i is the raw score of child i in a given sub-scale and X_i is a polynomial in age of varying order depending on the sub-scale. Next, we regress the square of the residuals in (1) on another flexible age polynomial (D_i) that can, but need not, have the same order as X_i :

$$(3) \quad (Y_i - \hat{\beta}X_i)^2 = \gamma + \delta D_i + v_i \quad \forall i$$

Our estimate of the age-conditional SD is the square root of the fitted values in (3). Finally, we compute the internally age-adjusted z-score by domain, ZY_i , by subtracting from the raw score the within sample age-conditional mean estimated in (2) and dividing by the within sample age-conditional SD obtained from (3). More specifically:

$$(4) \quad ZY_i = \frac{Y_i - \hat{\beta}X_i}{\sqrt{\hat{\delta}D_i}} \quad \forall i$$

This resulted in smooth normally distributed internally standardized scores, with mean zero across the age range (figures available upon request).

Appendix Tables
Table A1: Mean Sample Characteristics by ‘estrato’

	ESTRATO 1 (n = 403 in 134 blocks)	ESTRATO 2 (n = 459 in 159 blocks)	ESTRATO 3 (n = 457 in 199 blocks)	ESTRATO 4 (n = 11 in 5 blocks)
I CHILD CHARACTERISTICS				
6 - 18 months of age =1	0.352	0.346	0.324	0.182
19 - 30 months of age =1	0.328	0.309	0.398	0.364
31 - 42 months of age =1	0.320	0.344	0.278	0.455
Female =1	0.514	0.479	0.490	0.364
Premature (gestational age < 37 weeks) =1	0.166	0.146	0.151	0.273
Birth Weight in gr	3004.1 (538.6)	3045.8 (462.0)	3065.6 (536.6)	2791.0 (756.7)
Stunted (z-height for age < -2 SD) =1	0.214	0.179	0.138	0.273
Firstborn =1	0.471	0.488	0.549	0.455
II PARENTAL CHARACTERISTICS				
Age Mother	25.397 (6.485)	26.673 (6.476)	28.425 (6.603)	33.300 (6.325)
Education Years Mother	9.009 (3.175)	10.298 (3.038)	11.624 (3.069)	14.900 (1.729)
Mother has more than Secondary Education =1	0.137	0.306	0.433	0.900
Mother Works (paid or unpaid) =1	0.430	0.524	0.577	0.700
Mother Gave Birth Before Age 18 =1	0.201	0.135	0.074	0.000
Education Years Father	8.300 (3.087)	9.657 (3.228)	11.366 (3.426)	14.571 (2.507)
Father has more than Secondary Education =1	0.071	0.208	0.427	0.714
Father Deceased/No Longer Living with Child =1	0.303	0.331	0.324	0.364
III HOUSEHOLD CHARACTERISTICS				
Household Size	4.864 (1.695)	4.680 (1.719)	4.460 (1.378)	4.636 (1.027)
Grandmother Lives in Household =1	0.295	0.309	0.328	0.273
Crowding (people per room)*	2.146 (1.204)	1.850 (1.047)	1.581 (1.093)	0.807 (0.122)
Quality Floors (tiles, carpet, wood)* =1	0.437	0.725	0.891	1.000
External Windows* =1	0.849	0.889	0.884	1.000
Shared Kitchen* =1	0.218	0.214	0.160	0.091
Shared Bathroom* =1	0.280	0.264	0.188	0.000
More than One Bathroom* =1	0.102	0.137	0.289	1.000
Car* =1	0.042	0.092	0.210	0.909
Fridge* =1	0.620	0.756	0.827	1.000
Microwave* =1	0.132	0.194	0.333	0.727
Washing Machine* =1	0.454	0.542	0.735	1.000
Boiler* =1	0.268	0.338	0.530	0.909
Computer* =1	0.216	0.368	0.608	1.000
Smartphone* =1	0.022	0.072	0.195	0.455
Flat TV* =1	0.176	0.198	0.333	0.636
Home Theatre* =1	0.055	0.070	0.158	0.364
DVD* =1	0.648	0.688	0.814	0.909
Stereo* =1	0.536	0.612	0.689	0.727
Games Console* =1	0.074	0.122	0.164	0.364
Internet* =1	0.186	0.303	0.479	1.000
Garage* =1	0.052	0.131	0.274	1.000
IV LEVEL HOME STIMULATION				
Books and Newspapers (FCI Score)	2.211 (1.918)	2.532 (2.008)	3.116 (2.074)	4.909 (1.514)
Play Materials (FCI Score)	4.151 (2.175)	4.702 (2.297)	5.311 (2.397)	6.818 (2.523)
Play Activities (FCI Score)	4.010 (1.732)	4.331 (1.727)	4.740 (1.611)	5.091 (1.578)
V CHILD CARE ARRANGEMENTS				
Child Care Centre Attendance =1	0.323	0.309	0.298	0.545
Care Minder =1	0.469	0.556	0.530	0.636

*Variables used to construct wealth index. Data are means. SD reported in parantheses for continuous variables.

Table A2: Bayley-III Composite Scores by Wealth Quartile and Age Categories

	ALL			WEALTH QUARTILE 1			WEALTH QUARTILE 2			WEALTH QUARTILE 3			WEALTH QUARTILE 4		
	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD
I. Cognitive															
6 - 18 months	451	103.492	9.885	112	102.009	10.790	120	103.458	9.456	108	103.519	9.254	111	105.000	9.886
19 - 30 months	460	95.543	8.180	120	93.667	7.268	107	95.187	8.549	116	94.828	7.800	117	98.504	8.389
31 - 42 months	419	95.334	6.283	101	93.119	6.239	108	93.704	5.895	106	96.226	5.292	104	98.269	6.377
All	1330	98.173	9.119	333	96.306	9.283	335	97.672	9.235	330	98.121	8.521	332	100.602	8.919
II. Language															
6 - 18 months	451	99.022	10.248	112	97.732	10.590	120	98.492	9.724	108	98.324	10.191	111	101.577	10.202
19 - 30 months	460	93.046	10.481	120	91.575	9.358	107	91.224	10.945	116	92.664	10.062	117	96.598	10.810
31 - 42 months	419	96.845	8.832	101	94.079	8.336	108	94.824	8.357	106	97.425	8.378	104	101.038	8.666
All	1330	96.269	10.213	333	94.405	9.822	335	94.988	10.151	330	96.045	9.896	332	99.654	10.201
III. Motor															
6 - 18 months	451	95.244	12.281	112	95.089	12.177	120	93.933	12.707	108	96.176	11.581	111	95.910	12.609
19 - 30 months	458	99.288	10.268	120	98.458	9.586	107	99.449	10.340	115	99.122	11.077	116	100.164	10.106
31 - 42 months	417	103.513	9.445	100	101.880	9.385	108	101.556	8.747	105	105.076	9.429	104	105.538	9.652
All	1326	99.241	11.259	332	98.352	10.792	335	98.152	11.254	328	100.058	11.327	331	100.426	11.523
IV. Socio-Emotional															
6 - 18 months	451	94.956	13.275	112	92.857	13.993	120	95.000	14.595	108	95.694	12.852	111	96.306	11.195
19 - 30 months	460	92.674	13.211	120	91.250	13.367	107	91.449	12.977	116	93.578	12.680	117	94.359	13.670
31 - 42 months	419	91.241	9.820	101	90.000	9.513	108	90.370	10.450	106	91.509	9.516	104	93.077	9.586
All	1330	92.996	12.353	333	91.411	12.573	335	92.373	12.976	330	93.606	11.902	332	94.608	11.724

Table A3: Average Wealth Effects in Child Development Using Sample Weights

	Cognitive				Receptive Language				Expressive Language			
	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m
Wealth Quartile 2 =1	0.283** (0.083)	0.160 (0.155)	0.403** (0.139)	0.178 (0.133)	0.050 (0.124)	-0.135 (0.187)	0.021 (0.139)	0.232 (0.224)	0.115 (0.111)	0.042 (0.176)	0.161 (0.170)	0.081 (0.222)
Wealth Quartile 3 =1	0.175+ (0.089)	0.031 (0.142)	0.035 (0.166)	0.481** (0.147)	0.042 (0.150)	-0.097 (0.178)	0.018 (0.224)	0.289 (0.214)	0.210* (0.089)	0.136 (0.165)	0.205 (0.177)	0.320 (0.208)
Wealth Quartile 4 =1	0.577** (0.104)	0.245 (0.151)	0.861** (0.157)	0.637** (0.151)	0.423** (0.103)	-0.064 (0.148)	0.697** (0.175)	0.734** (0.234)	0.480** (0.127)	0.420* (0.184)	0.665** (0.167)	0.363 (0.250)
Age (months)	0.001 (0.004)	0.025 (0.018)	0.002 (0.018)	-0.011 (0.020)	-0.001 (0.004)	0.053** (0.017)	-0.019 (0.022)	-0.038+ (0.021)	0.002 (0.005)	0.017 (0.017)	0.012 (0.020)	-0.037 (0.024)
Female =1	0.263** (0.065)	0.179 (0.122)	0.241* (0.092)	0.470** (0.123)	0.381** (0.107)	0.213+ (0.127)	0.558** (0.158)	0.398** (0.136)	0.372** (0.078)	0.278+ (0.146)	0.352** (0.123)	0.572** (0.152)
p-value(F-test: Q2 = Q4)	0.01	0.67	0.01	0.00	0.00	0.71	0.00	0.00	0.00	0.07	0.00	0.12
p-value(F-test: Q3 = Q4)	0.00	0.18	0.00	0.29	0.00	0.84	0.01	0.00	0.03	0.16	0.01	0.82
p-value(F-test: testers)	0.00	0.00	0.07	0.00	0.00	0.00	0.04	0.02	0.00	0.00	0.01	0.11
Observations	1330	451	460	419	1330	451	460	419	1329	450	460	419
R-Sq Adjusted	0.13	0.18	0.18	0.17	0.14	0.20	0.23	0.15	0.14	0.18	0.15	0.16
	Fine Motor				Gross Motor				Socio-Emotional			
	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m
Wealth Quartile 2 =1	0.102 (0.113)	-0.122 (0.227)	0.317+ (0.187)	0.075 (0.155)	-0.090 (0.143)	-0.330+ (0.192)	-0.189 (0.168)	0.196 (0.166)	-0.034 (0.158)	-0.199 (0.259)	-0.083 (0.182)	0.387* (0.189)
Wealth Quartile 3 =1	-0.067 (0.211)	-0.032 (0.186)	-0.187 (0.274)	0.203 (0.176)	-0.018 (0.121)	-0.445* (0.204)	-0.026 (0.154)	0.390+ (0.197)	0.130 (0.097)	0.174 (0.178)	0.059 (0.199)	0.232 (0.232)
Wealth Quartile 4 =1	0.299** (0.109)	0.253 (0.180)	0.328+ (0.175)	0.422** (0.156)	0.006 (0.111)	-0.418* (0.164)	0.052 (0.131)	0.330+ (0.185)	0.223+ (0.114)	0.245 (0.167)	0.137 (0.170)	0.404* (0.177)
Age (months)	-0.004 (0.003)	0.025+ (0.013)	-0.040 (0.027)	-0.034 (0.021)	0.003 (0.004)	0.053** (0.015)	-0.049* (0.020)	-0.003 (0.019)	0.001 (0.005)	-0.024 (0.018)	-0.060** (0.019)	-0.063** (0.021)
Female =1	0.555** (0.149)	0.362** (0.126)	0.693** (0.194)	0.409* (0.180)	0.009 (0.081)	0.150 (0.124)	0.002 (0.117)	-0.071 (0.127)	0.081 (0.099)	0.182 (0.158)	-0.138 (0.129)	0.269+ (0.150)
p-value(F-test: Q2 = Q4)	0.07	0.04	0.95	0.03	0.42	0.63	0.14	0.32	0.08	0.06	0.15	0.93
p-value(F-test: Q3 = Q4)	0.10	0.07	0.13	0.21	0.82	0.86	0.64	0.70	0.46	0.69	0.67	0.40
p-value(F-test: testers)	0.00	0.00	0.06	0.05	0.00	0.00	0.00	0.13	0.00	0.00	0.01	0.00
Observations	1327	450	458	419	1325	450	458	417	1330	451	460	419
R-Sq Adjusted	0.11	0.23	0.23	0.11	0.05	0.13	0.12	0.04	0.09	0.11	0.14	0.17

Notes: +significant at the 10%; *significant at the 5%; **significant at the 1%. SE clustered at the neighbourhood level (primary sampling unit) in parantheses. P-value(F-test: Q2=Q4) and P-value(F-test: Q3=Q4) are the p-values of the F-test of equality of the coefficients on the second and fourth wealth quartiles, and on the third and fourth wealth quartiles, respectively. P-value(F-test: testers) is the p-value of the test of joint significance of all tester dummies. Estimates weighted by the inverse of the sampling probability.

Table A4: Determinants of Sample Loss between the Household Survey and the Bayley-III

	Loss Household Survey to Bayley-III Test =1 (n =1,533)
Wealth Quartile 2 =1	0.077 (0.127)
Wealth Quartile 3 =1	0.186 (0.120)
Wealth Quartile 4 =1	0.290* (0.121)
Age Child (in months)	0.026 (0.051)
Care Center Attendance =1	0.529* (0.232)
Care Center Attendance =1 * Age	-0.246* (0.114)
Diarrhea Last 15 Days=1	0.142 (0.098)
Age Mother	-0.014+ (0.007)
Number Children 5 to 7 in Household	0.170* (0.074)
Number Elder Older than 55 in Household	-0.171* (0.084)
Chi-Sq (7) of Joint Significance of Interviewer Dummies (p-value)	32.59 (0.000)

Notes: +significant at the 10%; *significant at the 5%. SE clustered at the neighbourhood level (primary sampling unit) in parantheses.

Table A5: Average Wealth Effects in Child Development Controlling for the Determinants of Sample Loss between the Household Survey and the Bayley-III Test

	Cognitive				Receptive Language				Expressive Language			
	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m
Wealth Quartile 2 =1	0.209** (0.077)	0.152 (0.129)	0.232 (0.155)	0.226* (0.110)	0.066 (0.058)	0.095 (0.122)	-0.063 (0.117)	0.152 (0.123)	0.093 (0.078)	0.045 (0.123)	0.117 (0.131)	0.164 (0.130)
Wealth Quartile 3 =1	0.292** (0.074)	0.168 (0.146)	0.180 (0.125)	0.530** (0.116)	0.140* (0.066)	0.080 (0.150)	0.046 (0.121)	0.298* (0.125)	0.174** (0.065)	0.119 (0.143)	0.089 (0.127)	0.354** (0.124)
Wealth Quartile 4 =1	0.523** (0.078)	0.269+ (0.137)	0.532** (0.117)	0.764** (0.129)	0.390** (0.067)	0.201 (0.122)	0.262* (0.127)	0.763** (0.134)	0.502** (0.074)	0.476** (0.147)	0.414** (0.125)	0.661** (0.124)
Age (months)	-0.010 (0.009)	0.016 (0.027)	-0.008 (0.025)	-0.018 (0.030)	-0.017* (0.008)	-0.006 (0.022)	-0.034 (0.022)	-0.023 (0.031)	-0.002 (0.009)	-0.014 (0.028)	-0.026 (0.023)	-0.006 (0.027)
Female =1	0.180** (0.053)	0.240* (0.100)	0.149+ (0.089)	0.210* (0.087)	0.175** (0.055)	0.118 (0.089)	0.294** (0.085)	0.162 (0.101)	0.309** (0.056)	0.209* (0.097)	0.378** (0.090)	0.370** (0.104)
p-value(F-test: Q2 = Q4)	0.00	0.36	0.05	0.00	0.00	0.41	0.02	0.00	0.00	0.01	0.03	0.00
p-value(F-test: Q3 = Q4)	0.00	0.49	0.00	0.04	0.00	0.37	0.05	0.00	0.00	0.07	0.01	0.02
p-value(F-test: testers)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.02
Observations	1330	451	460	419	1330	451	460	419	1329	450	460	419
R-Sq Adjusted	0.12	0.09	0.11	0.20	0.13	0.24	0.11	0.12	0.11	0.12	0.09	0.13

	Fine Motor				Gross Motor				Socio-Emotional			
	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m
Wealth Quartile 2 =1	0.106 (0.075)	0.119 (0.130)	0.141 (0.142)	0.014 (0.139)	-0.054 (0.076)	-0.223+ (0.130)	0.038 (0.124)	0.025 (0.142)	0.093 (0.077)	0.111 (0.130)	0.153 (0.144)	0.032 (0.160)
Wealth Quartile 3 =1	0.174* (0.067)	0.165 (0.121)	0.059 (0.122)	0.274* (0.128)	0.013 (0.079)	-0.191 (0.151)	0.003 (0.137)	0.276* (0.122)	0.194* (0.076)	0.257+ (0.142)	0.188 (0.115)	0.188 (0.137)
Wealth Quartile 4 =1	0.266** (0.077)	0.226+ (0.120)	0.225+ (0.122)	0.352* (0.148)	-0.018 (0.089)	-0.202 (0.152)	0.002 (0.118)	0.146 (0.157)	0.295** (0.079)	0.292* (0.133)	0.204+ (0.121)	0.382** (0.141)
Age (months)	-0.012 (0.009)	-0.033 (0.030)	-0.011 (0.027)	0.019 (0.026)	0.002 (0.008)	-0.001 (0.026)	-0.025 (0.024)	0.049+ (0.029)	0.034** (0.010)	0.059** (0.022)	-0.150** (0.027)	0.046 (0.032)
Female =1	0.290** (0.054)	0.336** (0.101)	0.317** (0.081)	0.220* (0.101)	-0.028 (0.045)	-0.110 (0.090)	0.090 (0.090)	-0.051 (0.089)	0.124* (0.054)	0.100 (0.089)	0.043 (0.081)	0.241* (0.094)
p-value(F-test: Q2 = Q4)	0.05	0.38	0.55	0.04	0.70	0.88	0.77	0.45	0.02	0.13	0.67	0.05
p-value(F-test: Q3 = Q4)	0.23	0.64	0.16	0.59	0.69	0.94	0.99	0.34	0.19	0.80	0.88	0.12
p-value(F-test: testers)	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Observations	1327	450	458	419	1325	450	458	417	1330	451	460	419
R-Sq Adjusted	0.09	0.13	0.09	0.09	0.05	0.02	0.11	0.09	0.09	0.09	0.16	0.11

Notes: +significant at the 10%; *significant at the 5%; **significant at the 1%. SE clustered at the neighbourhood level (primary sampling unit) in parentheses. P-value(F-test: Q2=Q4) and P-value(F-test: Q3=Q4) are the p-values of the F-test of equality of the coefficients on the second and fourth wealth quartiles, and on the third and fourth wealth quartiles, respectively. P-value(F-test: testers) is the p-value of the test of joint significance of all tester dummies. All regressions include the following controls (significant determinants of attrition as shown in Table A4): age of the mother, number of children 5-7 living in the household, number of elders (older than 65) living in the household, attendance to child care center, attendance to child care center interacted with age.

Table A6: Average Wealth Effects in Child Development Correcting for Selection into the Bayley-III Test (Heckman Correction)

	Cognitive				Receptive Language				Expressive Language			
	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m
Wealth Quartile 2 =1	0.197*	0.095	0.252+	0.286*	0.076	0.094	0.006	0.107	0.099	-0.009	0.146	0.218
	(0.083)	(0.139)	(0.152)	(0.117)	(0.059)	(0.118)	(0.115)	(0.124)	(0.081)	(0.135)	(0.127)	(0.138)
Wealth Quartile 3 =1	0.287**	0.113	0.181	0.644**	0.163*	0.089	0.096	0.278*	0.184**	0.062	0.119	0.462**
	(0.077)	(0.146)	(0.117)	(0.126)	(0.066)	(0.140)	(0.116)	(0.134)	(0.065)	(0.140)	(0.121)	(0.142)
Wealth Quartile 4 =1	0.531**	0.285*	0.534**	0.883**	0.428**	0.215+	0.340**	0.765**	0.516**	0.460**	0.444**	0.731**
	(0.078)	(0.131)	(0.118)	(0.129)	(0.065)	(0.119)	(0.124)	(0.124)	(0.074)	(0.141)	(0.120)	(0.142)
Age (months)	-0.002	-0.002	0.011	0.001	0.001	0.007	0.003	0.000	0.000	-0.015	-0.012	-0.030*
	(0.003)	(0.012)	(0.015)	(0.014)	(0.003)	(0.011)	(0.015)	(0.013)	(0.003)	(0.012)	(0.013)	(0.015)
Female =1	0.172**	0.177+	0.153+	0.305**	0.179**	0.103	0.302**	0.169+	0.316**	0.184+	0.369**	0.450**
	(0.053)	(0.101)	(0.085)	(0.096)	(0.055)	(0.087)	(0.085)	(0.097)	(0.056)	(0.096)	(0.095)	(0.106)
p-value(F-test: Q2 = Q4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.12
p-value(F-test: Q3 = Q4)	0.00	0.16	0.05	0.00	0.00	0.32	0.01	0.00	0.00	0.00	0.01	0.00
p-value(F-test: testers)	0.00	0.24	0.00	0.06	0.00	0.31	0.03	0.00	0.00	0.03	0.01	0.06
p-value(Wald Test Indep)	0.09	0.00	0.58	0.00	0.89	0.86	0.70	0.66	0.97	0.23	0.32	0.00
Observations	1533	531	533	469	1533	531	533	469	1533	531	533	469
	Fine Motor				Gross Motor				Socio-Emotional			
	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m
Wealth Quartile 2 =1	0.123	0.123	0.056	0.051	-0.093	0.006	0.032	0.052	0.103	0.014	0.134	0.038
	(0.081)	(0.129)	(0.149)	(0.151)	(0.081)	(0.016)	(0.117)	(0.143)	(0.075)	(0.154)	(0.136)	(0.158)
Wealth Quartile 3 =1	0.173*	0.191	-0.083	0.311*	-0.021	-0.316*	-0.058	0.357*	0.184*	0.151	0.141	0.188
	(0.068)	(0.117)	(0.125)	(0.138)	(0.083)	(0.141)	(0.133)	(0.139)	(0.075)	(0.148)	(0.115)	(0.135)
Wealth Quartile 4 =1	0.259**	0.230*	0.095	0.384**	-0.058	-0.255+	-0.011	0.221	0.274**	0.264+	0.190	0.401**
	(0.078)	(0.115)	(0.121)	(0.144)	(0.082)	(0.138)	(0.107)	(0.164)	(0.075)	(0.148)	(0.126)	(0.128)
Age (month)	0.001	0.003	-0.005	-0.007	-0.002	-0.272*	0.008	-0.016	0.002	-0.023+	-0.043**	-0.024
	(0.003)	(0.010)	(0.016)	(0.017)	(0.003)	(0.135)	(0.014)	(0.016)	(0.002)	(0.013)	(0.012)	(0.015)
Female =1	0.308**	0.341**	0.307**	0.226*	-0.046	-0.166+	0.073	0.053	0.130*	0.065	0.061	0.220*
	(0.054)	(0.102)	(0.092)	(0.101)	(0.048)	(0.099)	(0.086)	(0.106)	(0.053)	(0.100)	(0.080)	(0.099)
p-value(F-test: Q2 = Q4)	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
p-value(F-test: Q3 = Q4)	0.10	0.38	0.79	0.03	0.71	0.77	0.70	0.28	0.04	0.08	0.66	0.03
p-value(F-test: testers)	0.27	0.76	0.15	0.62	0.66	0.91	0.71	0.41	0.25	0.46	0.65	0.11
p-value(Wald Test Indep)	0.08	0.50	0.00	0.79	0.00	0.00	0.05	0.00	0.23	0.00	0.28	0.17
Observations	1533	531	533	469	1533	531	533	469	1533	531	533	469

Notes: +significant at the 10%; *significant at the 5%; **significant at the 1%. SE clustered at the neighbourhood level (primary sampling unit) in parantheses. Second stage of Heckman selection correction model reported, where first stage includes the identity of the interviewer as the omitted explanatory variable. p-value for the Wald Test of Independence (rho =0) reported. P-value(F-test: Q2=Q4) and P-value(F-test: Q3=Q4) are the p-values of the F-test of equality of the coefficients on the second and fourth wealth quartiles, and on the third and fourth wealth quartiles, respectively. P-value(F-test: testers) is the p-value of the test of joint significance of all tester dummies.

Table A7: Average Wealth Effects in Child Development Using 2-month Internally Standardized Scores

	Cognitive				Receptive Language				Expressive Language			
	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m
Wealth Quartile 2 =1	0.222** (0.076)	0.116 (0.133)	0.315* (0.139)	0.254* (0.119)	0.076 (0.063)	0.066 (0.119)	-0.027 (0.108)	0.170 (0.126)	0.068 (0.073)	-0.065 (0.119)	0.125 (0.127)	0.180 (0.133)
Wealth Quartile 3 =1	0.330** (0.072)	0.182 (0.140)	0.241* (0.117)	0.580** (0.124)	0.175** (0.067)	0.066 (0.132)	0.089 (0.114)	0.346** (0.127)	0.209** (0.063)	0.100 (0.125)	0.108 (0.121)	0.448** (0.120)
Wealth Quartile 4 =1	0.544** (0.077)	0.224 (0.136)	0.592** (0.110)	0.847** (0.135)	0.409** (0.067)	0.201+ (0.110)	0.279* (0.119)	0.777** (0.129)	0.455** (0.074)	0.321** (0.120)	0.388** (0.127)	0.692** (0.129)
Age (months)	0.000 (0.003)	0.005 (0.012)	0.007 (0.014)	0.005 (0.015)	0.001 (0.002)	0.009 (0.011)	0.005 (0.014)	-0.004 (0.013)	0.000 (0.003)	-0.015 (0.012)	-0.007 (0.012)	-0.002 (0.015)
Female =1	0.159** (0.053)	0.173+ (0.099)	0.121 (0.084)	0.253** (0.089)	0.160** (0.053)	0.068 (0.086)	0.273** (0.083)	0.187* (0.094)	0.275** (0.056)	0.117 (0.088)	0.362** (0.096)	0.395** (0.096)
p-value(F-test: Q2 = Q4)	0.00	0.40	0.04	0.00	0.00	0.25	0.02	0.00	0.00	0.00	0.04	0.00
p-value(F-test: Q3 = Q4)	0.00	0.76	0.00	0.03	0.00	0.25	0.09	0.00	0.00	0.16	0.03	0.05
p-value(F-test: testers)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.05
Observations	1330	451	460	419	1330	451	460	419	1329	450	460	419
R-Sq Adjusted	0.10	0.07	0.11	0.17	0.12	0.21	0.10	0.11	0.10	0.12	0.09	0.11
	Fine Motor				Gross Motor				Socio-Emotional			
	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m
Wealth Quartile 2 =1	0.107 (0.078)	0.093 (0.121)	0.159 (0.139)	0.052 (0.146)	-0.038 (0.080)	-0.183 (0.123)	0.091 (0.127)	-0.010 (0.155)	0.079 (0.078)	0.080 (0.136)	0.127 (0.146)	0.050 (0.162)
Wealth Quartile 3 =1	0.182* (0.073)	0.136 (0.113)	0.063 (0.124)	0.347* (0.137)	0.046 (0.076)	-0.156 (0.133)	0.038 (0.135)	0.291* (0.131)	0.215** (0.073)	0.280+ (0.149)	0.164 (0.119)	0.240+ (0.132)
Wealth Quartile 4 =1	0.232** (0.079)	0.193+ (0.116)	0.111 (0.118)	0.405** (0.136)	-0.067 (0.080)	-0.264+ (0.135)	-0.026 (0.114)	0.104 (0.152)	0.257** (0.077)	0.232+ (0.135)	0.203 (0.127)	0.403** (0.125)
Age (month)	0.000 (0.003)	0.006 (0.013)	-0.014 (0.015)	-0.006 (0.015)	0.003 (0.003)	0.004 (0.014)	-0.016 (0.014)	0.001 (0.016)	0.001 (0.002)	-0.019 (0.011)	-0.036** (0.012)	-0.014 (0.014)
Female =1	0.260** (0.052)	0.217* (0.088)	0.295** (0.085)	0.267** (0.094)	-0.044 (0.044)	-0.131 (0.082)	0.069 (0.087)	-0.036 (0.090)	0.111* (0.052)	0.079 (0.091)	0.066 (0.080)	0.228* (0.095)
p-value(F-test: Q2 = Q4)	0.12	0.39	0.73	0.02	0.74	0.54	0.32	0.48	0.04	0.20	0.55	0.05
p-value(F-test: Q3 = Q4)	0.52	0.63	0.70	0.68	0.14	0.39	0.63	0.16	0.58	0.71	0.73	0.20
p-value(F-test: testers)	0.00	0.00	0.00	0.11	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Observations	1327	450	458	419	1325	450	458	417	1330	451	460	419
R-Sq Adjusted	0.07	0.11	0.08	0.05	0.05	0.02	0.12	0.07	0.07	0.06	0.08	0.09

Notes: +significant at the 10%; *significant at the 5%; **significant at the 1%. SE clustered at the neighbourhood level (primary sampling unit) in parantheses. P-value(F-test: Q2=Q4) and P-value(F-test: Q3=Q4) are the p-values of the F-test of equality of the coefficients on the second and fourth wealth quartiles, and on the third and fourth wealth quartiles, respectively. P-value(F-test: testers) is the p-value of the test of joint significance of all tester dummies.

Table A8: Average Wealth Effects in Child Development Using Composite Scores

	Cognitive				Language				Motor				Socio-Emotional			
	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m
Wealth Quartile 2 =1	1.196+	0.825	1.613	0.968	0.307	-0.165	-0.094	1.149	-0.056	-1.633	1.235	-0.089	0.935	2.037	0.367	0.653
	(0.627)	(1.235)	(1.051)	(0.713)	(0.617)	(1.077)	(1.079)	(1.090)	(0.808)	(1.461)	(1.315)	(1.362)	(0.908)	(1.764)	(1.729)	(1.466)
Wealth Quartile 3 =1	1.942**	1.022	1.122	3.193**	1.783**	0.553	1.015	3.559**	1.266+	-0.793	0.790	3.318*	1.975*	2.955	1.609	1.622
	(0.610)	(1.325)	(0.957)	(0.809)	(0.596)	(1.226)	(1.248)	(1.067)	(0.753)	(1.461)	(1.347)	(1.379)	(0.902)	(1.969)	(1.472)	(1.284)
Wealth Quartile 4 =1	4.187**	2.599*	4.425**	5.136**	4.959**	3.280**	4.419**	7.115**	1.303	-1.029	0.971	3.576*	3.188**	4.059*	3.048+	3.045*
	(0.633)	(1.238)	(0.962)	(0.966)	(0.613)	(1.113)	(1.285)	(1.096)	(0.881)	(1.463)	(1.315)	(1.370)	(0.939)	(1.861)	(1.698)	(1.175)
Age (mth)	-1.147**	-0.429**	-0.247*	0.096	-3.670**	-1.059**	0.426**	0.142	0.900**	1.132**	0.055	0.048	-0.653**	-0.431**	-0.527**	0.368*
	(0.097)	(0.119)	(0.113)	(0.101)	(0.449)	(0.126)	(0.125)	(0.124)	(0.127)	(0.145)	(0.138)	(0.146)	(0.184)	(0.151)	(0.149)	(0.147)
Age Squared	0.017**				0.132**				-0.011**				0.010**			
	(0.002)				(0.020)				(0.003)				(0.004)			
Age Cube					-0.001**											
					(0.000)											
Female =1	1.830**	2.626**	1.482*	1.500*	2.992**	1.975*	4.155**	3.210**	2.465**	1.935+	3.252**	1.932*	1.514*	0.976	1.166	2.346*
	(0.437)	(0.944)	(0.719)	(0.573)	(0.503)	(0.815)	(0.891)	(0.910)	(0.538)	(1.143)	(0.928)	(0.954)	(0.673)	(1.301)	(1.066)	(1.024)
Mean Dep Var	98.17	103.49	95.54	95.33	96.27	99.02	93.05	96.84	99.24	95.24	99.29	103.51	93.00	94.96	92.67	91.24
SD Dep Var	9.12	9.89	8.18	6.28	10.21	10.25	10.48	8.83	11.26	12.28	10.27	9.45	12.35	13.27	13.21	9.82
Gap Q4 - Q1 (in SD)	0.46	0.26	0.54	0.82	0.49	0.32	0.42	0.81	0.12	-0.08	0.09	0.38	0.26	0.31	0.23	0.31
p-value(F-test: Q2 = Q4)	0.00	0.13	0.01	0.00	0.00	0.00	0.00	0.00	0.12	0.70	0.84	0.01	0.01	0.22	0.08	0.15
p-value(F-test: Q3 = Q4)	0.00	0.23	0.00	0.02	0.00	0.03	0.01	0.00	0.97	0.88	0.90	0.85	0.18	0.53	0.36	0.29
p-value(F-test: testers)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
Observations	1330	451	460	419	1330	451	460	419	1326	451	458	417	1330	451	460	419
R-Sq Adjusted	0.26	0.11	0.12	0.16	0.24	0.35	0.15	0.13	0.18	0.16	0.12	0.05	0.09	0.06	0.11	0.08

Notes: +significant at the 10%; *significant at the 5%; **significant at the 1%. SE clustered at the neighbourhood level (primary sampling unit) in parentheses. Gap Q4 - Q1 is the size of the SES gap between the fourth and first quartile. It is computed by dividing the estimated coefficient on wealth quartile 4 by the standard deviation (SD) of the estimation sample. P-value(F-test: Q2=Q4) and P-value(F-test: Q3=Q4) are the p-values of the F-test of equality of the coefficients on the second and fourth wealth quartiles, and on the third and fourth wealth quartiles, respectively. P-value(F-test: testers) is the p-value of the test of joint significant of all tester dummies.

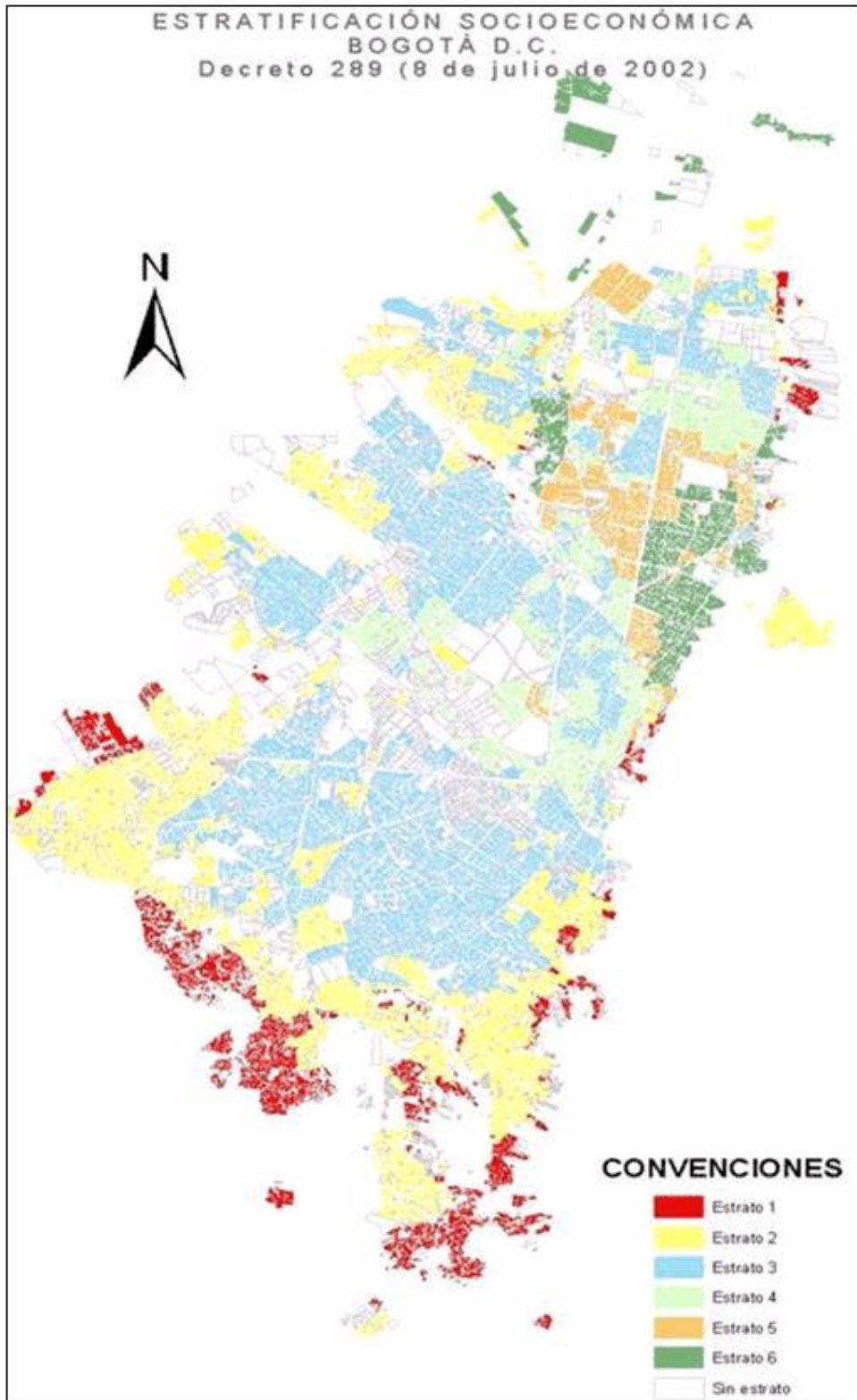
Table A9: Average Wealth Effects Controlling for Parental, Biomedical, Home Environment and Institutional Factors

	Cognitive				Receptive Language				Expressive Language			
	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m
Wealth Quartile 2 =1	0.131+	0.109	0.131	0.107	-0.041	-0.053	-0.203+	0.027	-0.026	-0.074	-0.050	0.044
	(0.073)	(0.121)	(0.151)	(0.105)	(0.062)	(0.119)	(0.121)	(0.117)	(0.079)	(0.129)	(0.134)	(0.126)
Wealth Quartile 3 =1	0.159*	0.084	0.024	0.353**	-0.014	-0.116	-0.134	0.133	0.041	0.010	-0.079	0.208+
	(0.074)	(0.145)	(0.130)	(0.114)	(0.059)	(0.135)	(0.114)	(0.119)	(0.066)	(0.157)	(0.128)	(0.123)
Wealth Quartile 4 =1	0.275**	0.180	0.233+	0.427**	0.108	0.005	-0.107	0.420**	0.227**	0.305+	0.058	0.340*
	(0.082)	(0.142)	(0.139)	(0.142)	(0.069)	(0.122)	(0.145)	(0.139)	(0.076)	(0.160)	(0.136)	(0.157)
Age (months)	-0.011**	-0.007	0.008	0.014	-0.009**	-0.008	0.005	0.001	-0.005	-0.011	-0.005	0.003
	(0.003)	(0.013)	(0.013)	(0.016)	(0.003)	(0.013)	(0.015)	(0.014)	(0.003)	(0.014)	(0.014)	(0.016)
Female =1	0.168**	0.260**	0.075	0.240**	0.141**	0.116	0.220**	0.162+	0.284**	0.224*	0.313**	0.382**
	(0.051)	(0.099)	(0.084)	(0.084)	(0.052)	(0.096)	(0.083)	(0.090)	(0.057)	(0.105)	(0.091)	(0.097)
p-value(F-test: wealth quartiles =0)	0.01	0.63	0.32	0.01	0.24	0.80	0.39	0.02	0.01	0.12	0.71	0.12
p-value(F-test: parental =0)	0.03	0.94	0.05	0.01	0.00	0.00	0.34	0.02	0.00	0.04	0.35	0.14
p-value(F-test: biomedical =0)	0.00	0.00	0.01	0.04	0.01	0.01	0.07	0.37	0.03	0.14	0.07	0.16
p-value(F-test: home environment =0)	0.00	0.14	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.86	0.00	0.00
p-value(F-test: institutional care =0)	0.00	0.41	0.04	0.01	0.00	0.15	0.05	0.01	0.21	0.95	0.47	0.11
p-value(F-test: testers)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.15
Observations	1330	451	460	419	1330	451	460	419	1329	450	460	419
R-Sq Adjusted	0.18	0.14	0.19	0.27	0.19	0.29	0.18	0.19	0.15	0.14	0.14	0.17

	Fine Motor				Gross Motor				Socio-Emotional			
	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m	All	6-18 m	19-30 m	31-42 m
Wealth Quartile 2 =1	0.060	0.129	0.068	-0.062	-0.109	-0.238+	0.001	-0.026	0.118	0.177	0.111	0.069
	(0.079)	(0.113)	(0.143)	(0.147)	(0.077)	(0.135)	(0.140)	(0.137)	(0.076)	(0.144)	(0.146)	(0.159)
Wealth Quartile 3 =1	0.068	0.122	-0.087	0.146	-0.079	-0.312*	-0.108	0.208	0.155*	0.214	0.067	0.139
	(0.072)	(0.127)	(0.117)	(0.139)	(0.079)	(0.156)	(0.141)	(0.134)	(0.076)	(0.161)	(0.130)	(0.131)
Wealth Quartile 4 =1	0.073	0.201	-0.026	0.045	-0.145+	-0.350*	-0.044	-0.004	0.168*	0.262	0.036	0.156
	(0.088)	(0.122)	(0.136)	(0.166)	(0.088)	(0.144)	(0.154)	(0.173)	(0.083)	(0.170)	(0.138)	(0.134)
Age (months)	-0.009**	-0.002	0.011	-0.005	-0.001	-0.001	0.003	-0.021	0.001	-0.018	-0.051**	-0.029+
	(0.003)	(0.013)	(0.015)	(0.016)	(0.004)	(0.015)	(0.014)	(0.016)	(0.003)	(0.015)	(0.013)	(0.016)
Female =1	0.277**	0.345**	0.219**	0.260**	-0.026	-0.074	0.080	-0.024	0.080	0.101	-0.007	0.137
	(0.053)	(0.108)	(0.078)	(0.093)	(0.043)	(0.086)	(0.087)	(0.093)	(0.054)	(0.096)	(0.084)	(0.091)
p-value(F-test: wealth quartiles =0)	0.79	0.40	0.73	0.51	0.31	0.08	0.85	0.23	0.14	0.47	0.88	0.65
p-value(F-test: parental =0)	0.06	0.55	0.19	0.01	0.04	0.92	0.05	0.39	0.06	0.56	0.10	0.12
p-value(F-test: biomedical =0)	0.00	0.00	0.02	0.17	0.00	0.02	0.00	0.02	0.54	0.90	0.15	0.55
p-value(F-test: home environment =0)	0.01	0.51	0.18	0.07	0.64	0.20	0.32	0.47	0.00	0.14	0.00	0.00
p-value(F-test: institutional care =0)	0.01	0.08	0.04	0.01	0.10	0.96	0.58	0.02	0.20	0.44	0.77	0.58
p-value(F-test: testers)	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Observations	1327	450	458	419	1325	450	458	417	1330	451	460	419
R-Sq Adjusted	0.12	0.16	0.12	0.13	0.08	0.04	0.13	0.10	0.10	0.07	0.15	0.13

Notes: +significant at the 10%; *significant at the 5%; **significant at the 1%. SE clustered at the neighbourhood level (primary sampling unit) in parantheses. All regressions include the following covariates: parental factors (maternal education dummies, presence of the mother, presence of the father, and first child), biomedical factors (prematurity, prematurity*age, birthweight, stunting), home environment factors (FCI score for books, newspapers and magazines, FCI score for play materials, and FCI score for play activities), and institutional factors (dummies for attendance to public preschool, private preschool or hogar comunitario). Missing values of the covariates have been replaced with the median values within the wealth quartile. Since birth weight was missing for 8.38% of the sample, missing values have been imputed with the predicted value from a regression of birth weight on sex, gestational age and height-for-age. We have accounted for these replacements with dummy variables.

Figure A1: Spatial Distribution of *Estratos* in the City of Bogota



Source: <http://institutedeestudiosurbanos.info/endatos/0200/02-030-vivienda/02.03.01.htm>